

# Ranger Rick

National Wildlife Federation

April 1988

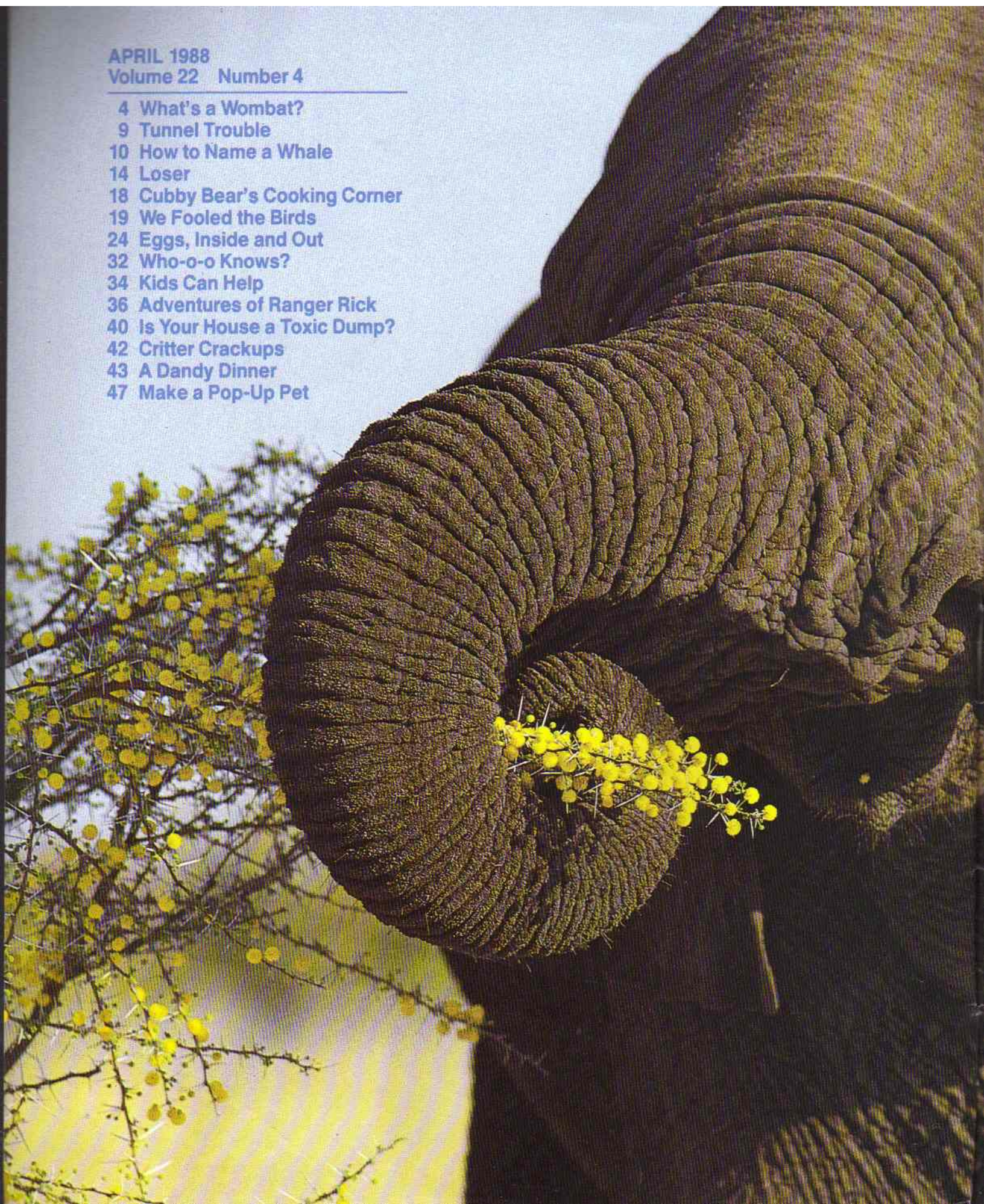




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**This African elephant is  
enjoying a tasty flower  
snack. For more flower-  
feasters, turn to  
pages 43-46.**

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by Sallie Luther

What has the teeth of a beaver and the body of a little bear, can dig like a badger, and is a koala's cousin? If you guessed *wombat*, you really know your animals. But if you didn't, don't feel left out. The wombat is one of the least-known Australian creatures.

Fat, furry wombats come in two basic types: naked-nosed and hairy-nosed. A fuzzy covering of hairs around the nostrils of the hairy-nosed type makes the main difference. The hairy-nosed wombat is also smaller than its relative, with softer, silkier fur and larger ears. But both types are stumpy-tailed, short-legged, and bulky-bodied. Both types have poor eyesight but very good senses of smell and hearing. And both types, like most Australian mammals, are *marsupials*. The young are born "not quite done" and spend their first few months of life in their mother's pouch.

### Might a Wombat Bite?

All wombats can trace their family tree back to an Ice Age ancestor the size of a rhino. You wouldn't have messed with that whopper of a wombat. But today's wombats aren't wimps either. Although they look meek and mild, wombats have front teeth that can chomp a chunk from whatever might frighten them. Unlike all other marsupials, wombats have teeth like those of beavers, rats, and other rodents. The teeth keep growing and wearing down throughout the wombat's life. They come in very handy for nipping off the grasses that wombats eat, for gnawing underground roots, or for ripping up bark for bedding.

### Where's a Wombat's Home?

The girl at right is holding a half-grown, naked-nosed wombat. It was orphaned

when a car killed its mother. When this youngster is full grown, about 40 pounds (18 kg) heavier, it will be set free.

Naked-nosed wombats live along Australia's rainy southeastern coast. Lots of *Eucalyptus* (you-kuh-LIP-tuss) trees grow there. The leaves of these trees are food for the wombats' cousins, the koalas.

There are also lots of creeks in this part of Australia. And wombats often make their burrows in the slopes above the creeks. Wombats dig like crazy with their strong claws. *Scoop and kick, scoop and kick*, the soft dirt goes flying.

But digging's not so easy for hairy-nosed wombats. Most of them live farther inland where there is little rain. The ground often becomes very hard. But does this stop the wombats from digging? No way! In fact, a hairy-nosed wombat's burrow is often deep and long, complete with side tunnels



# What's a Wombat?



Have you hugged  
your wombat today?  
This girl holds an  
orphan. In spite of  
warning signs like  
the one below, at  
left, cars kill many  
wombats each year.





and rooms for resting!

A number of hairy-nosed wombats usually live close together. Their burrows open near each other's, as if in a giant prairie dog town. And on the surface, much-traveled trails spread out from the burrow openings. These lead to the feeding areas.

Wombats lead pretty lazy lives. They spend much of each day underground, com-

ing out after sunset when it's cooler. They find some grasses to eat or some bark bits for their nest. Then they duck back inside their burrows. But wombats also take sunbaths, dozing for hours in a favorite spot.

Female wombats spend a lot of time raising their families. They carry their single young in a pouch on their belly for six or seven months. Then the little wombat leaves the pouch and wanders with Mama wombat. The youngster stops drinking its mother's milk when it is a year and a few months old. But it may stay with her for several more months.

**Below is a common, or naked-nosed, wombat. It digs like a badger, chomps like a beaver, looks like a little bear, and is a koala's closest cousin.**



Photos by John Cancalosi







## **Who Wouldn't Want Wombats Around?**

Plenty of hairy-nosed wombats live in South Australia. But the few living farther to the north in Queensland may be in big trouble. Only one small group remains. Although they are protected by law from being disturbed by humans, a long dry spell with little to eat could wipe them out. Or too many of them could be eaten by wild dogs called dingoes.

Their naked-nosed cousins have other troubles. Many people think there are too many naked-nosed wombats. They often burrow in gardens and pastures or under houses. They may damage fences put up to keep out rabbits, which are pests in Australia. So some people think of the wombats as pests too, and they kill many each year.

Roadways are also trouble. Wombats are quick, but cars are even quicker.

You may never get to see a wombat in the wild. But you might get to see wombats in a zoo. In the meantime, you're ready to show what you know when someone asks: "What's a wombat?"

**Larger ears, softer fur, and fuzzy nose pads are special to hairy-nosed wombats (left). Here one wombat gives another a nuzzle.**



# ...and now the Numbat

From its pointed snout and long, lappy tongue to the tip of its strong-clawed toes, a numbat's really neat. It has some special things about it that make it different from most of Australia's other marsupials:

- A numbat is usually out and about during daylight hours instead of during the night.
- A mother numbat doesn't have a pouch to hold her young. They must cling to Mom's nipples and belly fur.

- A numbat has more teeth than any other land animal. But it swallows almost all of its food whole.

The nimble numbats are only squirrel-sized, with a squirrel-like bushy tail. They skip and scamper from log to rotten log in search of termites, their main food.

When frightened, numbats may sit straight up on their haunches, flatten their bodies, or hurry into hollow logs.

And if numbats knew how few of their kind were left, they might be frightened for their own future. Most of the forests they need to live in have been destroyed. So they now survive only in a few small areas of southwest Australia.

But in the meantime, each snuffles along, poking its nose into a hollow log here, probing under a rock there, going about its numbat business in its neat little numbat way. 🦘





# Tunnel Trouble



Willy the wombat is getting sleepy. Can you help him find the tunnel that leads to his bedroom? (Here's a hint: **It's not as easy as it looks!** If you can't find the way in *one minute*, see page 32 for the answer.)



by Charles Thiesen

Silver is a humpback whale that lives in the Atlantic Ocean. In winter she goes south and joins a lot of other humpbacks in the Caribbean Sea. In summer she goes north to live near Cape Cod, Massachusetts, with a smaller group of whales. Silver spends a lot of her time with other humpbacks named Nurse and Pegasus and Salt.

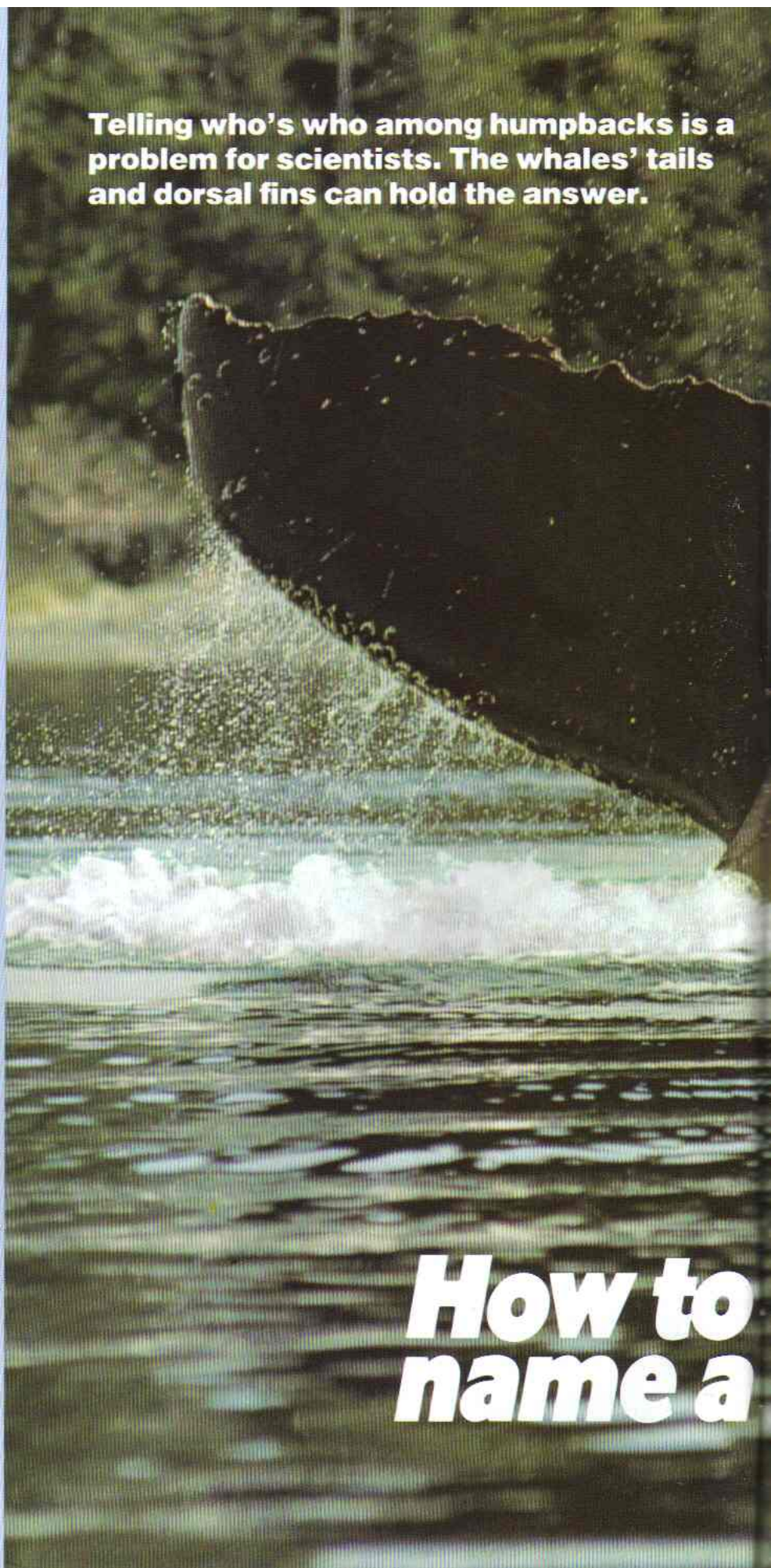
A humpback whale such as Silver can weigh more than 10 adult African elephants. And if a humpback could stand on its tail, it might be taller than a four-story building. These are big, wild animals—not somebody's pets. So how did they get their names?

Cetologists (see-TOHL-uh-jists) are scientists who study whales. They want to find out more about such things as where each whale goes during the year, whether it comes back to the same place over and over, and whether it stays with the same whales.

But the scientists can't follow each whale all over the ocean to learn such things. They need a way to tell the whales apart at a glance.

Scientists have known for a long time that humpbacks have black-and-white markings and scars on their bodies. And they've known that the markings are different on each whale. In fact, the patterns are as different from one whale to another as your fingerprints

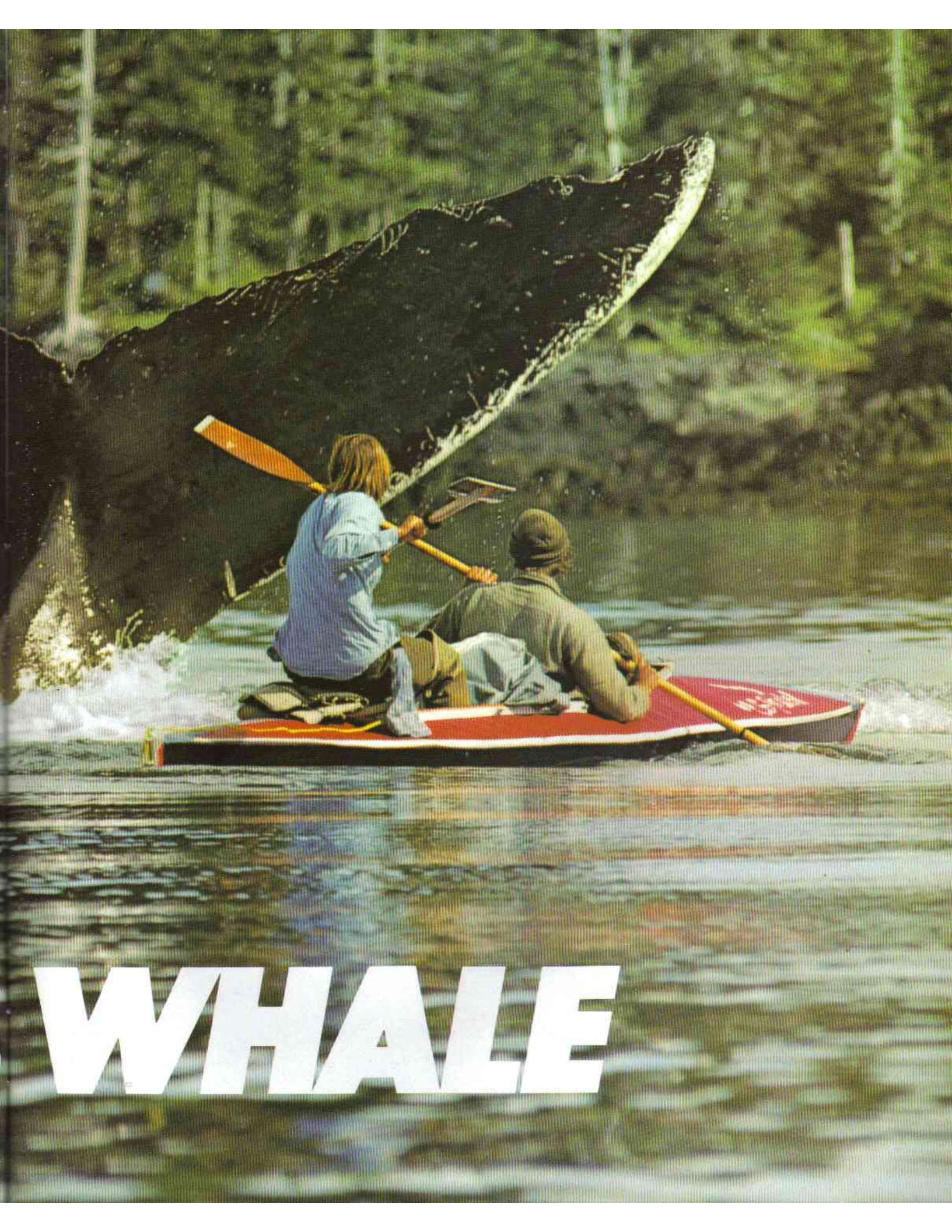
**Telling who's who among humpbacks is a problem for scientists. The whales' tails and dorsal fins can hold the answer.**



**How to  
name a**

Photo by Paul Chesley/Photographers Aspen





# WHALE



are from mine. A humpback often flips up its big tail as it begins to dive. So the markings on its tail make the whale easy to identify.

With this in mind, the whale scientists near Cape Cod got together about 10 years ago. They decided to name the whales they all watched. One female whale had an unusual white marking on her dorsal fin. (That's the fin that sticks up from a whale's back.) The scientists could have called her something like WH-1. But they named her Salt. A name like that was easier to remember than just letters and numbers.

Naming the whales was part of some serious scientific work. But it was fun too. Soon more and more people wanted to do it. Now there's a big party held each year for scientists and other whale-namers. They look at photos of the tails and dorsal fins of the whales that were seen for the first time that year. It might be a new calf, for example, that had shown up with its mother. After studying the tail and dorsal fin pictures, the scientists suggest names for the whales. Then they vote to pick their favorites.

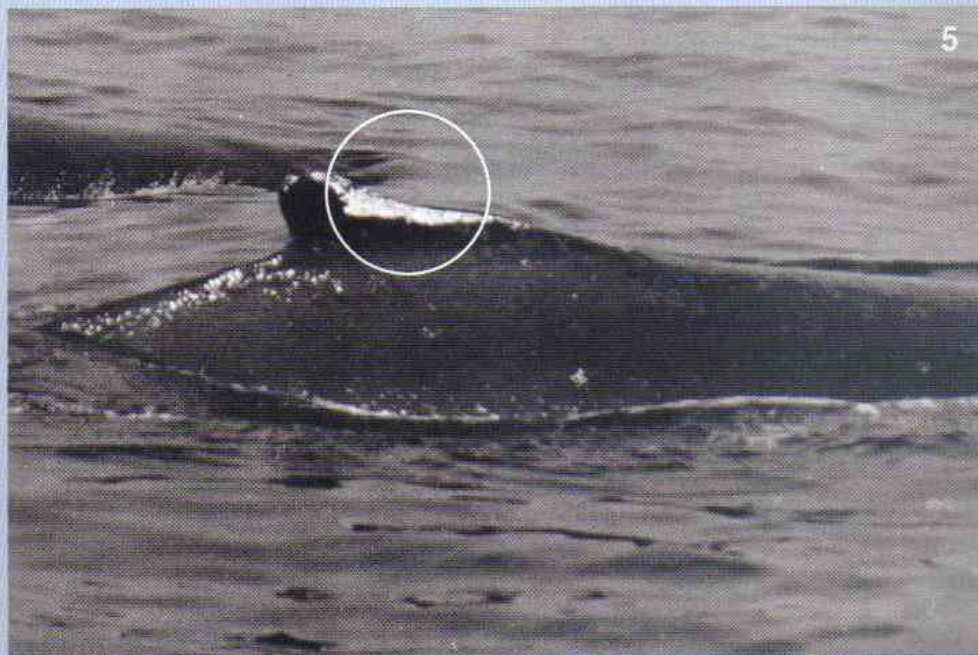
It sounds easy, but there are some important things to think about when naming whales:

*The name has to have something to do with the way the whale looks. (You can't just give a whale a name that you*



Photos courtesy Gloucester Fishermen's Museum





happen to like, such as Fluffy.) Rakes, for example, has marks that look as if they were made by the teeth of a rake. They were probably made by an orca, or killer whale.

*A whale's name should not be a person's name.* A whale named Patches, for example, often "puts on shows" for boats. (He got his name from patches of white on his tail.) Patches often leaps into the air and flaps his flippers, but scientists don't know why. If his name were George or Bob, it might be easy to think he "shows off" for the same reasons a person does. But his non-person name helps remind the scientists that Patches is a wild animal, doing something they don't understand.

Over 300 whales have been named so far. Cloud is one. He has a marking on his tail that looks like a storm cloud. Olympia is another—she has five circles like the symbol of the Olympic Games on her tail.

But of course the whales don't need names to tell each other apart. They can tell who is who . . . naturally! 🐳

**Naming humpback whales by the marks on their fins and tails is one way scientists can tell them apart. Pictured at left are: 1. Flag; 2. Zipper; 3. Seven; 4. Loon; 5. Salt; 6. Dalmatian.**



# LOSER

The little dog lay very still on the table. He had been hit by a car, and Peter was worried. He turned to Dr. Sue and asked, "Do you think he'll make it?"



Drawings by Ted Lewin



It was quiet at the Oak Park Veterinary Clinic when Peter arrived for his after-school job. The clinic's daytime office hours were over, but there was lots to do before evening hours began.

First Peter checked both exam rooms to make sure they were spotless. He also stocked these rooms with all the supplies Dr. Susannah Boyd might need when she was examining animals. Then he began putting fresh water in the animal cages. That's when he heard Dollie, the secretary, calling on the intercom, "Need you up front, Dr. Sue. It looks bad!"

Peter rushed to the front exam room where Dollie was showing in a tall man in a business suit. The man carried a bundle wrapped in an old blanket. "I was just passing through town," he said. "Stopped for a burger over on the bypass. I heard brakes screech and a dog scream, but nobody stopped. When I got over there this poor little guy was crushed into the gravel on the side of the road."

Dr. Sue gently pulled open the blanket. A small reddish-brown dog lay very still. His eyes were closed. He didn't even seem to be breathing. Chunks of gravel were ground into his skin. His tail was bent and his left front leg looked like a half-eaten chicken drumstick.

"Is he alive?" whispered Peter.

"Just barely," said Dr. Sue, pushing back the dog's lip and seeing his pale gray gums.

"I don't know who his owners are," said the man. "There are no houses along that stretch of road. The waitress at the burger shop said you were the nearest vet, so I came here."

"Thanks for helping," said Dr. Sue. "We'll take it from here. Dollie, call the police and the animal shelter. See if anyone has reported this dog missing." She carefully picked up her new patient. "Peter, come with me."

Back in the treatment room Dr. Sue worked fast. She hung a plastic bag filled with a clear liquid on the overhead rack. Then she attached a tube to the bag. She let the clear liquid run

through the tube to force all of the air out of it. Next she threaded a long hollow needle into the vein of the dog's good foreleg. She attached the needle to a tube that was coming from the plastic bag, and lifesaving fluids began running into the dog's veins. "That will help get his blood pressure up," she said.

The dog opened one eye and stared at Peter. "Will he make it, Dr. Sue?" Peter asked.

"I don't know yet, Peter," Dr. Sue answered. "We'll just have to wait and see how he does. But I'll give him some antibiotics so he won't get any infections. And we'll put him in the incubator. It has heat to help warm him up and oxygen to make it easier for him to breathe. You stay here and watch him, Peter, while I see the animals with appointments. Let me know if he has trouble breathing."

Peter rolled the incubator out into the middle of the room. Now Loser—as Peter had decided to call the dog—could watch while he finished his chores. Whenever Peter was in sight Loser was content, but if Peter walked out of his view the little dog began to whimper.

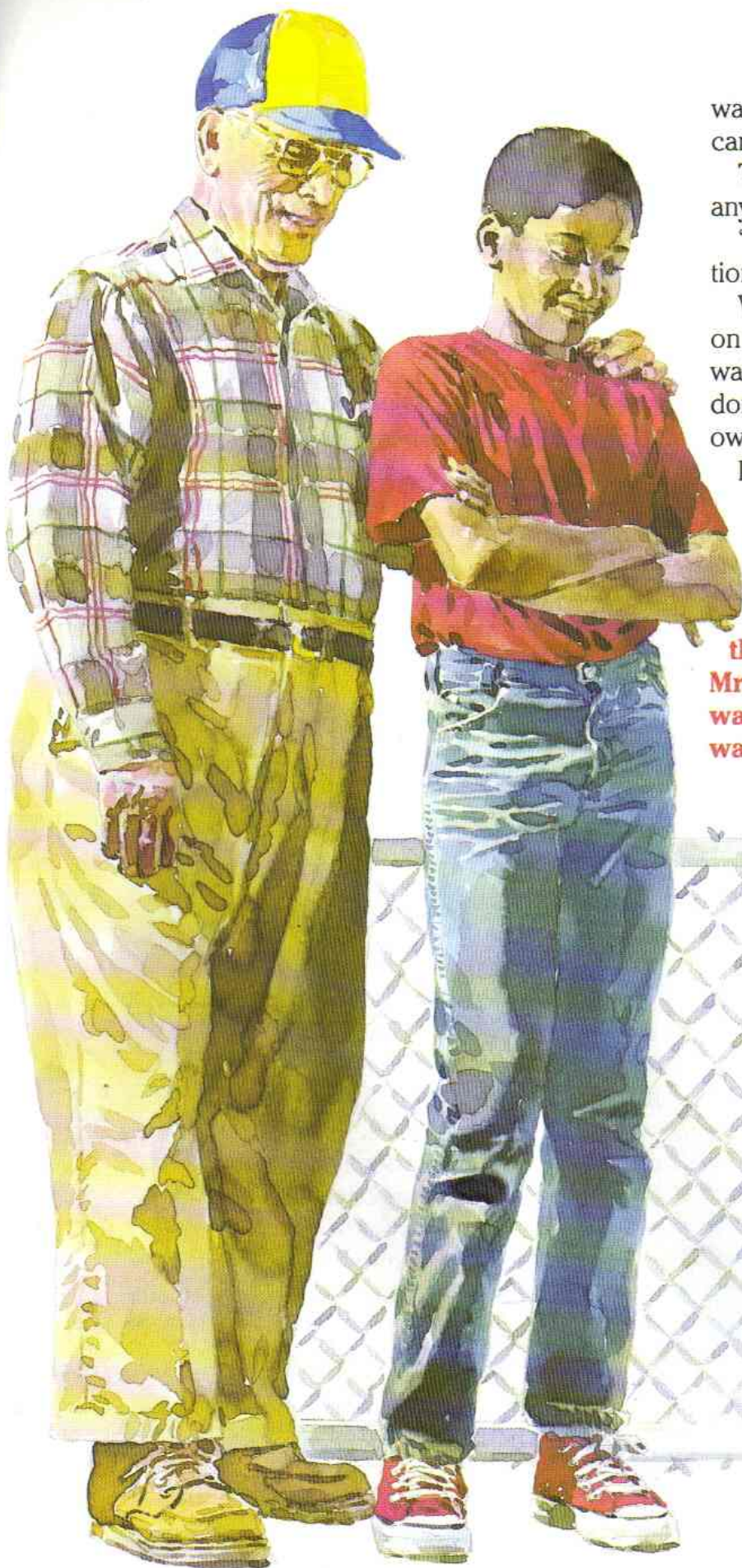
"I hate to leave him," confessed Peter at closing time. "He seems scared to be alone. I wish his owners had put tags on him. Then we'd know how to get in touch with them. And, as long as I'm wishing, I wish his owners had kept him on a leash. Then this accident would never have happened."

"You're right, of course," said Dr. Sue. "But don't worry, I'll give Loser a pain drug to help him sleep. And I'll come back tonight to check on him. That's all we can do."

The next day was Saturday—no school—and Peter was at the clinic early. Loser was still asleep, but he woke when they switched on the light. He barked happily and tried to wag his tail, but it was broken.

"Most of the tail will have to come off," said Dr. Sue. "The end of it is too badly smashed to save. I will have to take the leg off too. There





was so much damage to the blood vessels I can't repair them."

Then, turning to Dollie, Dr. Sue asked, "Has anyone called to ask about him?"

"No. I'll try the newspaper and the radio station today. Somebody must be missing this guy!"

When no one called about Loser that day or on Sunday or Monday, Dr. Sue said, "We can't wait much longer to take off the tail and leg. I don't like to go ahead without hearing from an owner, but I'll operate tomorrow."

Loser was just beginning to wake up from his operation when Peter got to work on Tuesday afternoon. Where the crushed leg

**"That's the first time I ever saw a three-legged kangaroo chase a squirrel!" Mr. Winthrop teased. Peter knew that was Mr. Winthrop's way of saying Loser was a very special dog.**





had been, there were now neat rows of stitches. When he heard Peter's voice, Loser perked up his ears. The dog opened his eyes and wagged what was left of his tail. Then he tried to get up to play, but that was a problem. With one front leg gone and a badly bruised back leg, Loser was very unsteady on his feet. He needed crutches!

"Watch this," said Dr. Sue. She showed Peter how to sling a towel under Loser's belly. The sling supported most of Loser's weight while the little dog hopped around on his two good legs. Soon Loser was hobbling in the yard with Peter holding up the towel.

One afternoon several weeks later, Peter had taken Loser outside to play. Loser didn't need



the towel support by this time, but he still had a very funny hop!

"What have you got there?" called old Mr. Winthrop, driving up in his pickup truck. "A three-legged kangaroo?" he teased.

"It's a dog," laughed Peter, knowing that Mr. Winthrop was only kidding. Loser hopped over to bark hello and wagged his stump of a tail so hard he lost his balance and toppled over.

"How'd he lose his leg?"

"He was hit by a car."

Loser wasn't bothered by his fall. He shook himself and bounced off after a squirrel.

"Never did know a kangaroo that would chase a squirrel," teased Mr. Winthrop.

"How's Jessie doing?" asked Peter, changing the subject. Jessie was Mr. Winthrop's very old and very sick beagle. She was Mr. Winthrop's best friend.

"Poorly. I came to get some more of that

heart medicine Dr. Sue gives her. Better hurry along too."

Peter looked back at Loser. He was worried about the dog because nobody had come to claim him. Peter pleaded with his mom to keep him, but she said, "Absolutely not! This apartment is no place for a dog." He asked everyone he knew, but nobody wanted Loser. Dr. Sue was kind, but she couldn't just keep Loser at the clinic forever. Sooner or later he would have to go to the animal shelter.

A few days later Peter was talking to Dollie. "Who would ever want to adopt a three-legged, stumpy-tailed dog?" he asked. "It's just not fair. He's so brave and he never feels sorry for himself and nobody will take him!" Loser didn't have time to feel sorry for himself. He was trying to figure out how to get Dr. Sue's cat down from her favorite spot on top of the refrigerator. That cat was just too uppity!

"It is sad," agreed Dollie. "Lots of sad things are going on. Dr. Sue had to go out this afternoon to put Mr. Winthrop's Jessie to sleep. That man sure did love that old dog!"

Just then Dr. Sue walked into the clinic. "Whew, that was a tear-jerker!" she exclaimed. "But it was time. Jessie was suffering and I couldn't do any more for her."

"How's Mr. Winthrop taking it?" asked Dollie. "He'll surely be lonely without her."

"Well, we talked about that," said Dr. Sue, "and you know what he told me?" She winked at Peter. "He told me to tell you he was thinking of getting himself a kangaroo for a pet."

It took Loser three tries to jump up into the cab of the pickup truck. Each time he fell back he shook himself, backed up to get a running start, and tried again.

"He's sure no quitter," grinned Mr. Winthrop.

"No," agreed Dr. Sue. "He is *not* a quitter!"

Peter added, "I guess you'll have to change his name. He's no loser either!" 🐾



## BUTTERSCOTCH BIRD NESTS



Every spring we give a big party to welcome all the new young animals to Deep Green Wood. And Morgan Mockingbird always makes bird nests to decorate the table. You can try these at your next party or make them as a special spring-time treat for your family.

### Here's What You Need:

- 1 12-oz. bag butterscotch bits
- 1 5-oz. can chow mein noodles
- 1 cup chopped salted peanuts
- 1 bag small jelly beans

### Here's What You Do:

Melt the butterscotch bits in a pan over low heat. Add noodles and peanuts to the melted bits and stir. Drop large spoonfuls of the mixture onto 2 cookie sheets lined with wax paper. Shape each nest with your fingers. Put 4 or 5 jelly beans into each nest. Chill in the refrigerator. You should be able to make about 15 nests.

Drawings by Alton Langford



Cubby Bear's

# COOKING CORNER



My Uncle Joe is a wildlife photographer. And it seems I was always asking him the same old question: "How do you get close enough to wild birds and other animals to get such great shots?" So last August he finally offered to show me.

Joe said that lots of birds were gathering in a flooded pasture near my home here in eastern Pennsylvania.

"Some of the birds are *shorebirds*," Joe explained to me. I remembered seeing shorebirds at the beach. They looked like tiny white toys as they scampered along just out of reach of the waves. Joe said the birds were coming to the pasture to hunt insects and worms in the pools of water.

# We Fooled the Birds

by Steven Haas  
as told to Joe McDonald

Some of the other birds were herons and egrets (EE-gretz). These large birds use their long legs to wade into deeper water to catch fish.

"To get close enough to the birds to take pictures, we'll fool them by using *decoys*," Joe said. We got busy making some right away.

First we traced bird patterns onto cardboard and thin plywood. Then we used pictures we found in a bird book to help us paint them the right colors. (See photo below.)

**My uncle and I wanted to fool wild birds into coming close to us. The first step was to make some fakes called decoys.**







With two decoys in hand, I slogged across the flooded pasture. The trick was to set up the decoys so they

looked as real as possible. I was almost done when I got stuck in the muck and my uncle had to rescue me!

Finally we cut out the decoys and attached a little pole to each one so that we could stick them in the mud. When we finished we had a dozen shorebirds, two egrets, and one gull.

The next day Joe picked me up at sunrise. After we got to the pasture it took almost an hour to set up. I stuck the decoys in the mud while Joe put up the two *blinds*. These are little tents that photographers hide in. They're painted with brown and tan blotches to look like bushes.

Joe gave me a pair of binoculars and let me use the blind closer to the decoys. He would be taking pictures from the other one. "You'll have to sit very still or the blind will wiggle and scare off the birds," he told me.

My blind had holes on each side, and I could look through them to watch. I was sitting on an upside down bucket, and every time I moved just a little it made a squishy noise in the mud. The birds must not have heard it, because all of a sudden I looked up and saw a snowy egret standing only 15 feet (5 m) from my blind!

I'd never been that close to such a neat wild bird before. I was so excited I thought for sure the bird would hear my heart pounding. I was afraid it would see me because it always seemed to be looking my

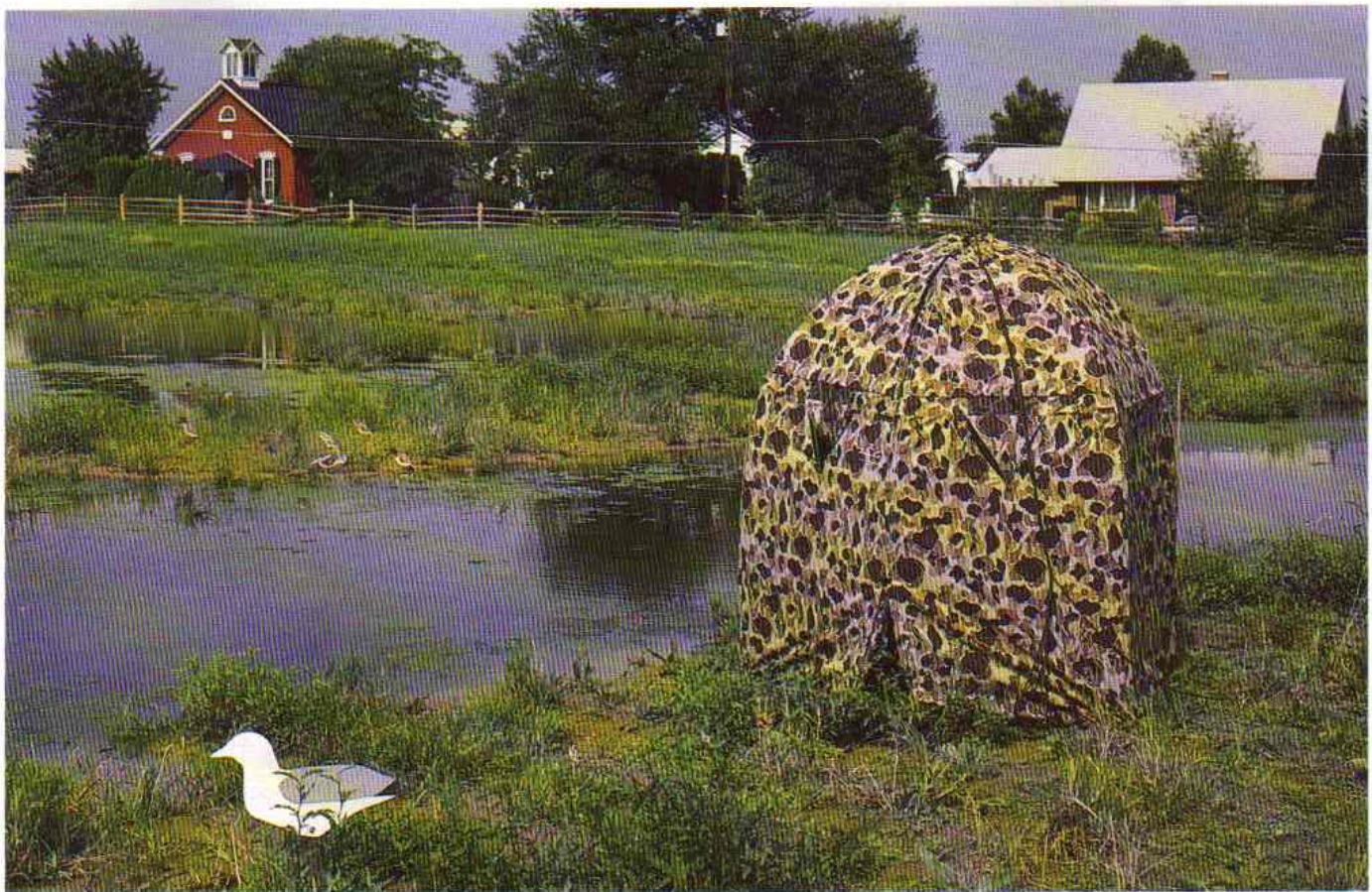




way. The blind fooled it though, because it began to walk closer. Each time the egret stepped it lifted a big yellow foot with long toes up out of the mud, then slowly dropped it back in. That reminded me of the time I tried walking with swim fins on.

Another white bird joined it. Joe later told me it was a little blue heron. When young, these birds are white instead of

**Now to wait and watch. By hiding in our tentlike blinds, we hoped to fool the birds into thinking we were just a couple of big bushes.**





blue-gray like their parents.

A few minutes later I heard a loud *squawk!* The egret and heron spread their wings and were gone. But an even larger bird swooped down to take their place. I remembered this one from my bird book. It was a great blue heron.

The heron stuck its neck straight out and started walking toward me through the shallow water. I thought it was looking right at me. It wasn't, because suddenly it jabbed its long beak into the pool and brought up a small, wriggling fish. It hadn't speared the fish but had grabbed it between the tips of its bill. The heron

**From my blind I watched a young little blue heron (right) wade through the shallow water. Later, a couple of dowitchers (below) swooped in and began to bob for worms in the soft mud.**

tossed the fish around until the fish's head was pointed toward the bird's throat. Then it swallowed the fish in one quick gulp!

That excited me so much that I felt like shouting. But I'm glad I didn't, because a moment later I heard a loud swooshing sound above me. I almost ducked, it sounded so close. I peeked out the other



side of the blind just in time to see a flock of shorebirds land. Our decoys were working!

All of the shorebirds scampered across the mud. They dipped their thin beaks into the pools of water for worms and insects.

Two birds reminded me of a sewing machine because they kept bobbing their heads up and down in the water. Joe told me they were *dowitchers* (DOW-uh-churz).

It was easy to sit still while the birds were there. Some of the shorebirds seemed very tame and came within just a few feet of my blind. Then a flock of Canada geese came honking in.

The geese quieted down for a few minutes, then they started honking again. Suddenly they all began running across the water. When I looked to check on the shorebirds, they were gone and the great blue heron was flying away. Then I saw why. The farmer's big dog was running along the other side of the creek, chasing the geese.

Joe called over and said I could get out of my blind. It felt good to be able to stand up and stretch in the fresh air. It was almost noon and I was starving. I couldn't wait to go home to eat. But most of all I wanted to tell everyone about how we used decoys to fool all those birds! 🦉



...the finest way to start a young person thinking, learning, doing, questioning

## Ranger Rick®

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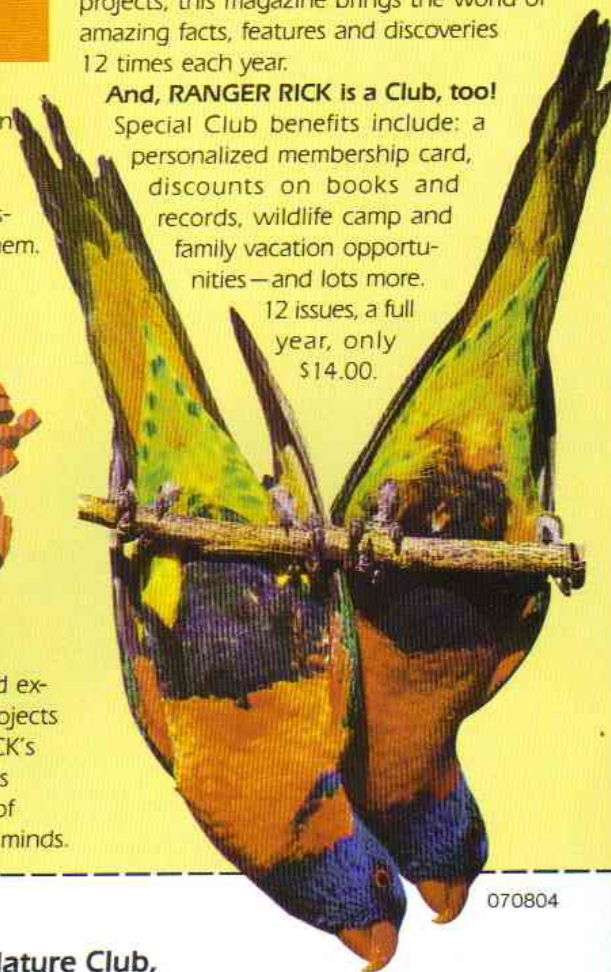
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# EGGS

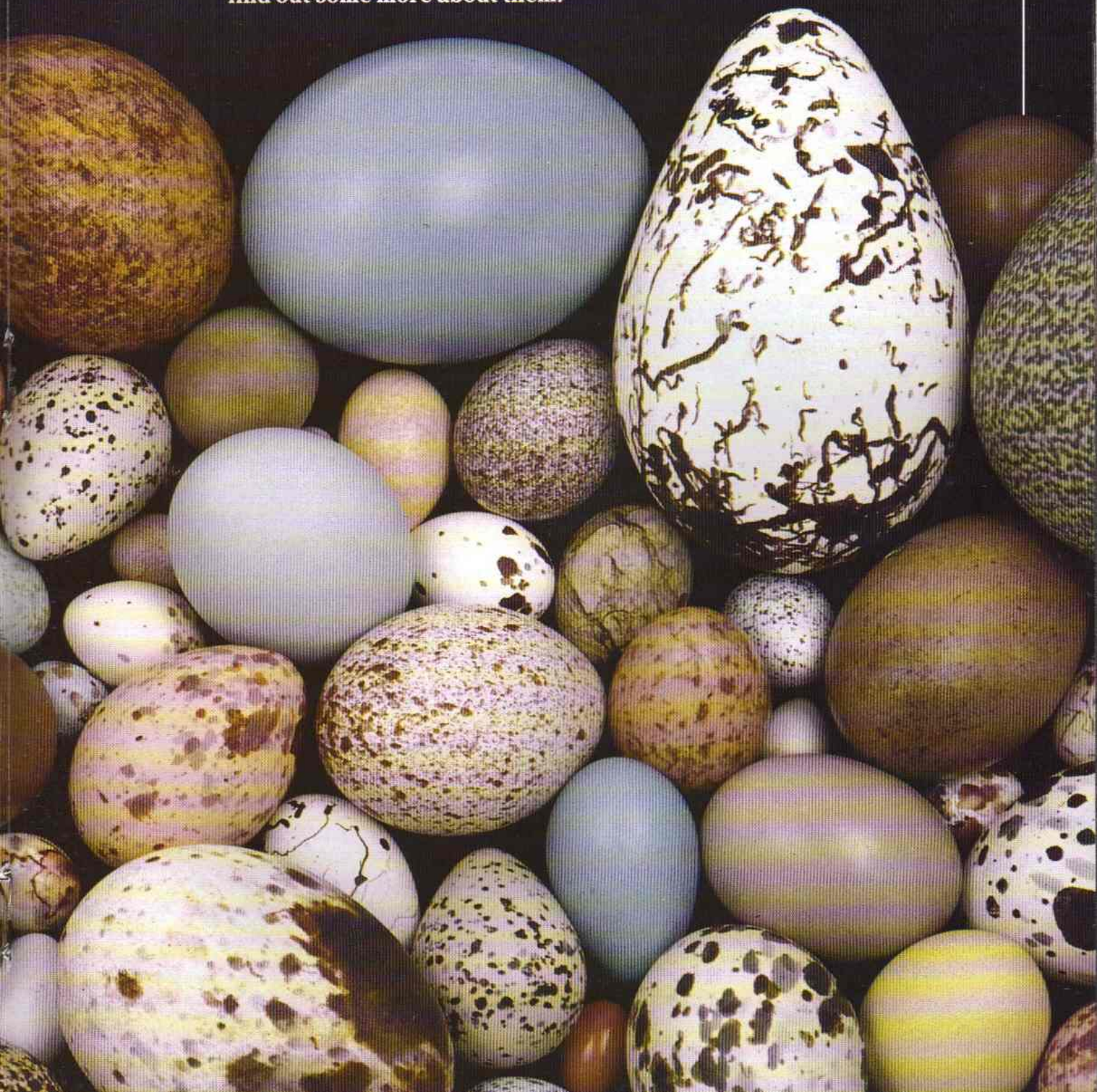
INSIDE and OUT





by Claire Miller

**Speckled and plain, oblong and round, huge and tiny—birds' eggs come in lots of sizes, shapes, and colors. There are about 9000 kinds of birds in the world, and each lays its own special eggs. With spring here and Easter right around the corner, it's a good time to find out some more about them.**





## WHAT IS "EGG-SHAPED"?

When people say something is egg-shaped, they mean it's shaped like a chicken egg. But eggs come in other shapes too. Screech owls lay round eggs; flamingo eggs are long and thin. And a seabird called a murre (rhymes with fur) lays a pear-shaped egg with a pointy end (below). That's the best shaped egg to have if you nest on a bare rocky ledge. A rounder egg would roll off the edge of a cliff much more easily. The photo below is really six pictures of one egg. It shows how a pointy egg rolls around in a circle with the small end at the center.

## SURPRISES IN SIZES

Hummingbirds lay the smallest eggs of any birds, and ostriches lay the largest. But even though a hummingbird lays a tiny egg, it is big compared with the bird's size. An ostrich weighs 50 times more than its egg. But a hummingbird weighs only 8 times more than its egg.

A seabird called a blue-gray noddy takes the prize for laying the largest egg for the bird's size. The noddy weighs only *three* times as much as its egg. If you weigh 60 pounds (27 kg), you would have to lay an egg the size of a big watermelon to match a noddy!

The biggest eggs around weren't always ostrich

eggs. Much larger eggs belonging to elephant birds have been found on an island called Madagascar. The island is off the southeastern coast of Africa. Elephant birds were at least 10 feet (3 m) tall. And their eggs weighed as much as 32,000 hummingbird eggs or 180 chicken eggs. Sad to say, though, you will never see one of these big birds alive—they became extinct about 500 years ago.

## BIG EGGS FROM SMALL MOMS

Birds that lay their eggs on the ground, such as a killdeer, usually lay large eggs for their size. For example, a killdeer mother is about the same size as a robin mother. But her eggs are much larger than robin eggs. The eggs are larger because they hold more "bird food." The birds growing inside need a lot of food because they have to be fully developed before they hatch. When killdeer pop out of their eggs, they can run and hide from enemies.

Like many other young birds, robins are undeveloped when they hatch. That's because their eggs have less food in them. They're helpless for many days, but that's OK, because they are tucked away safely in treetop nests.

**Birds' eggs come in so many shapes and sizes! Below: The murre's egg is pointy at one end. Right: Hummingbirds lay tiny eggs, and the extinct elephant bird's was huge.**

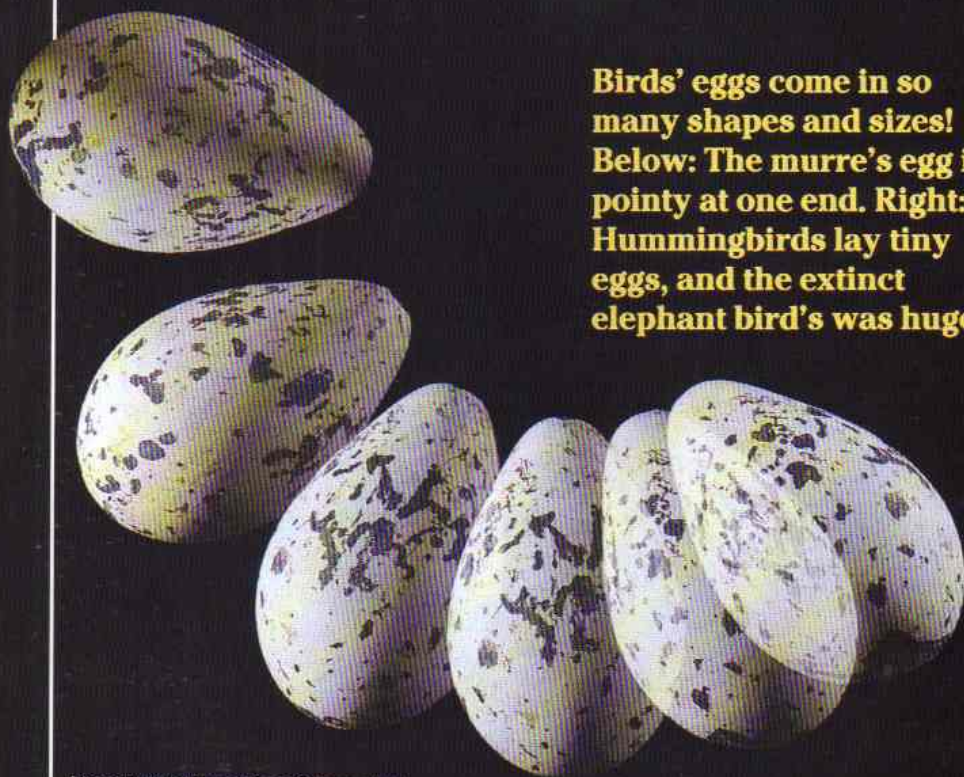


Photo by Kim Taylor/Bruce Coleman Ltd.











## WHERE DO THE COLORS COME FROM?

Most birds lay colored eggs. Before they are laid, the eggs pass through a tube called the oviduct (OH-vuh-duct). When they get near the end of the oviduct, the shells push against special glands and get coated with plain colors or speckles.

Birds that are related can lay very different eggs. The colorful, shiny eggs on the right are all from birds in the tinamou (TIN-uh-moo) family. Tinamous live in Central and South America. These birds lay eggs in shades of blue, green, red, brown, and purple. But each kind of tinamou lays eggs of only one color.

## COLORS ARE MORE THAN PRETTY

Why do different kinds of birds lay different-colored eggs? Scientists don't have the full answer to this question. For example, they can't explain for sure how having blue eggs (rather than another color) helps a robin.

It's easier to figure out how laying speckled eggs is useful to birds. The speckles make it hard to see the eggs when they are laid on twigs, stones, sand, or grass. If you were an animal looking for a good meal, you might not see the speckled eggs at all.

Markings on eggs probably help some birds tell their eggs from others. For example, murres nest in big colonies close together on rocky ledges near the sea. Many of them leave their eggs at the same time and go off to eat. When they return, each bird seems to tell her one egg from the others by its markings.

White eggs are easier for enemies to notice—so why don't all birds lay colored eggs? Birds that have white eggs usually lay them out of sight. Some lay them in burrows or tree holes. Others sit on them round the clock till they hatch. And if the birds have to be away from the nest, some of them cover the eggs with grass or leaves before they go.

## MATCHING BEFORE HATCHING

Instead of building their own nests, female European cuckoos lay their eggs in other birds' nests. Each of the cuckoo's eggs have a certain pattern and color. And she usually lays her eggs in the nests of birds with eggs that look like hers. The other birds are often "tricked" into raising the cuckoo babies just as they would their own.

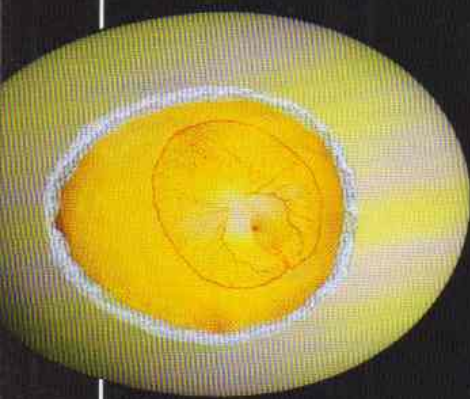
In the photo at left there are nine sets of eggs from

**Tinamou eggs come in pretty Easter-egg colors (below). And cuckoo egg colors (left) are pretty tricky because they can match the eggs of other birds. (The cuckoo eggs are at the bottom of each set.)**



nine nests. Notice how well the cuckoo egg (on the bottom of each set) usually matches the other eggs. Sometimes a cuckoo egg doesn't match the others. But even then, the cuckoo egg may be hatched by the other birds. Cuckoos usually seem to know which birds will raise eggs that don't match their own. (Read more on cuckoos in *Ranger Rick*, February 1987.)





DAY 3

**Take a look inside this chicken egg (left and below) and you'll see how a red spot on the yolk turns into a chick in just 21 days.**

### EVERYTHING A NEW BIRD NEEDS

An egg is a perfect package for the growing bird inside it. The yolk and white provide all the food and water the bird needs. Look at an eggshell with a strong magnifying glass and you'll see that it's covered with tiny holes. Air goes into and out of the egg through the holes.

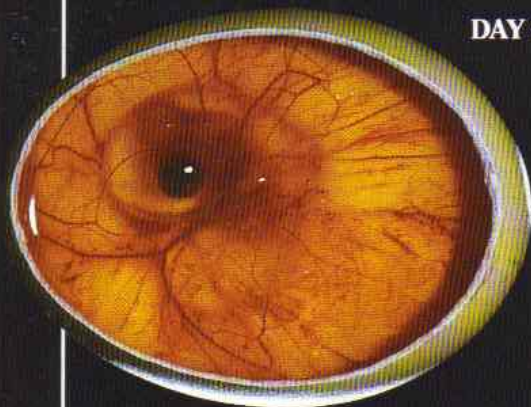
A little while before the bird hatches, its head lies near an air pocket at one end of the egg. By then its lungs are ready to be used. To get its first air, the bird pushes its beak into the pocket and starts to breathe.

By the time the chick is

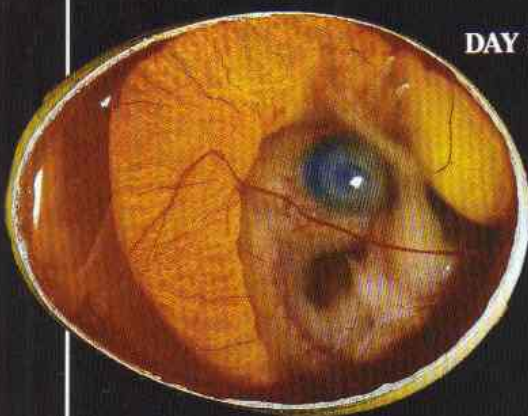
ready to hatch, its eggshell is much thinner than when it was laid. When an egg is first laid, the shell has a lot of calcium in it. Then some of the calcium from the shell begins to dissolve and is carried by blood vessels to the growing chick. The chick uses the calcium to help build its bones. As the calcium in the shell gets carried away, the eggshell becomes weaker and easier for the chick to crack open.

### NOISY EGGS

Has an egg ever talked to you? Maybe not, but many birds start peeping and clacking their bills a few days before they hatch. For example, a wood duck starts to make sounds inside its shell before it hatches. Through its shell it can hear the other unhatched duck-



DAY 5



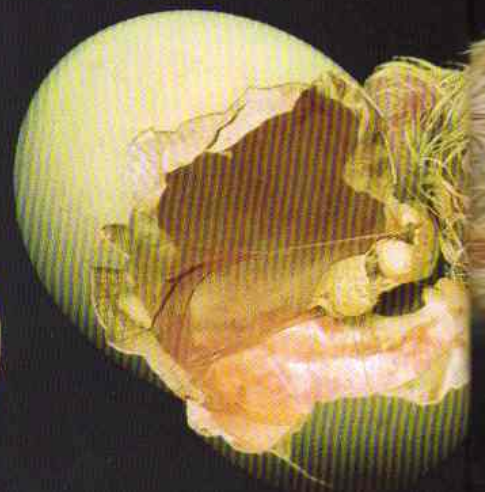
DAY 10



DAY 15



DAY 19



DAY 21



lings in the nest. And soon it begins to learn the sounds its mother makes. By the time the duckling hatches, it knows her voice well. And it knows it should jump to her from its tree-hole nest when she calls from below.

### WHEN WILL IT EVER HATCH?

Some eggs take longer to hatch than others. Red-winged blackbird eggs hatch in about 11 days, and the eggs of the royal albatross, a seabird, usually take 79 days. But no matter how long it takes for young birds to hatch, they all start growing like the chick shown here.

### A PEEK INSIDE A CHICKEN EGG

(photos at left and below)

**DAY 3 after the egg has been laid:** The first thing you

can easily see is a tiny red heart surrounded by a circle of blood vessels.

**DAY 5:** Now you can see an eye. Blood vessels are carrying food from the yolk to the forming chick. And the beginnings of the brain and spine have formed.

**DAY 10:** The egg white and yolk are being used up as the chick grows. All of the tiny chick's organs, such as its lungs and stomach, are forming. And now you can see the beginning of a wing and a foot.

**DAY 15:** Sticky feathers are covering the chick. And its *egg tooth*, a tiny bump that grows on its upper beak, is beginning to form. Look closely and you'll see a tiny claw tucked under its eye.

**DAY 19:** It's getting crowded in there, and by now the chick is also making noises.

**DAY 21:** Here it comes! The chick used its sharp egg tooth to break out of the shell.

Now all it has to do is dry and fluff its feathers, and . . .

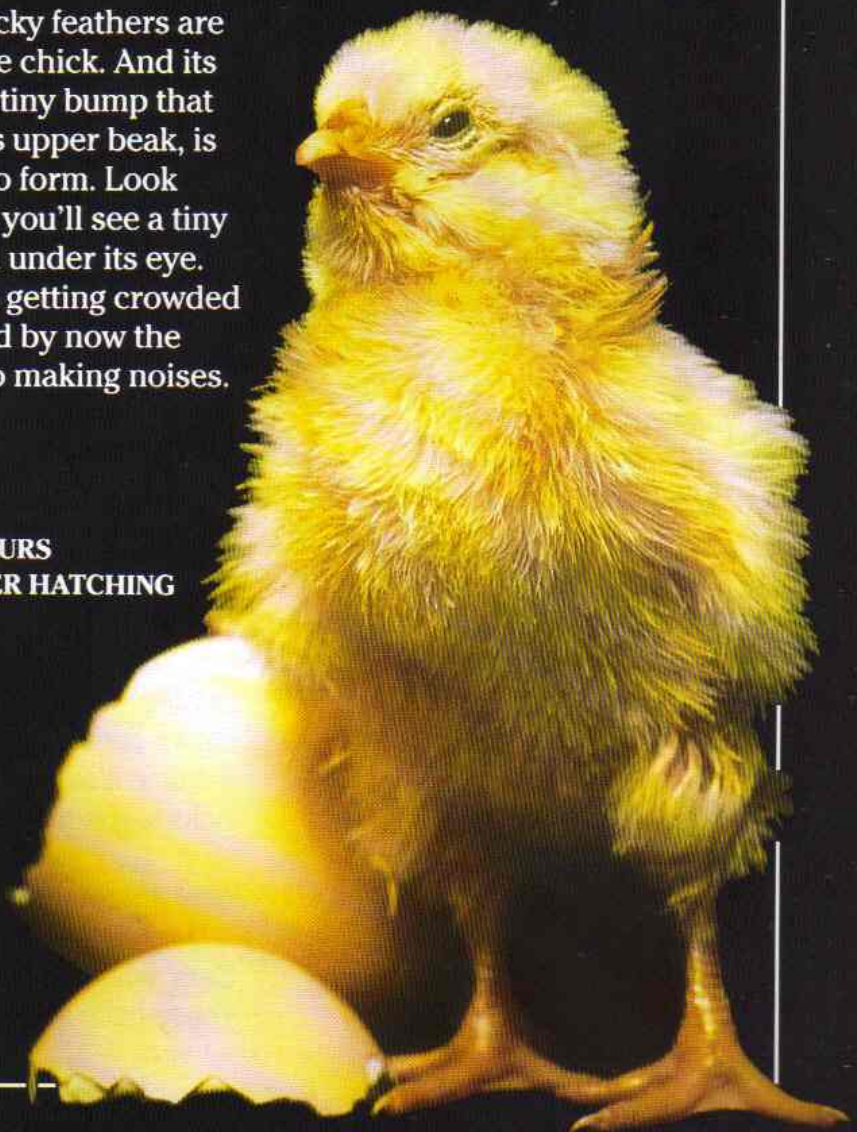
**2 HOURS LATER:** It's ready to run off and look for food.

And before *you* run off, here's one answer to the egg question everyone asks:

*Which came first, the chicken or the egg?* The egg came first—early reptiles and dinosaurs were laying eggs with shells long before there were any chickens on earth! 🐣



2 HOURS  
AFTER HATCHING







# Who-o-o Knows?

Dear Wise Old Owl,

**Since male mockingbirds imitate other birds' calls, do they ever attract the wrong mate?**

Kevin Keyser; Somers Pt., NJ

Some females may be fooled for a few seconds by the male mockingbird's imitations. But if a female robin or cardinal or other bird answers his calls, she soon discovers that Mr. Mockingbird is not her type. She goes off to find a mate of her own species. Birds recognize mates by their color, markings, and behavior, not just by their voice.

**Are baby gerbils born with fur and teeth?**

David Buxton; Kearns, UT

When a baby gerbil is born, it doesn't look much like a gerbil. It is pink and hairless with a blunt nose and just a stub for a tail. Its eyes and ears are sealed shut. Like most newborn mammals, it doesn't have any teeth. But the teeth and the fur come in quickly. And by the time it's a month old, baby looks just like Mom or Dad.

**Why do cats have whiskers?**

Amy Straw; College Park, MD

Cats' whiskers are special hairs. These hairs are so sensitive

that cats use them as "feelers."

In the wild, most cats hunt at night when it's hard for them to see well. Their whiskers act like fingers to help the cats feel their way in the dark and not bump into things. For example, sometimes a cat will try to slip through a narrow space or stick its head into a dark hole. Then the cat will use its whiskers to tell whether it has enough room.

**What is the biggest meat-eating animal that's ever been alive?**

Anthony Lake; Short Hills, NJ

The largest meat-eating animal that ever lived on land was the dinosaur *Tyrannosaurus rex*. This dinosaur was about 45 feet (14 m) long.

The biggest meat-eating animal that has ever lived on earth is the blue whale. The blue whale is  $1\frac{1}{3}$  times as long as *Tyrannosaurus rex* was, but it feeds on shrimp only 1 inch (2.5 cm) long. And it eats a ton (900 kg) of these tiny shrimp in a day. W.O.O.

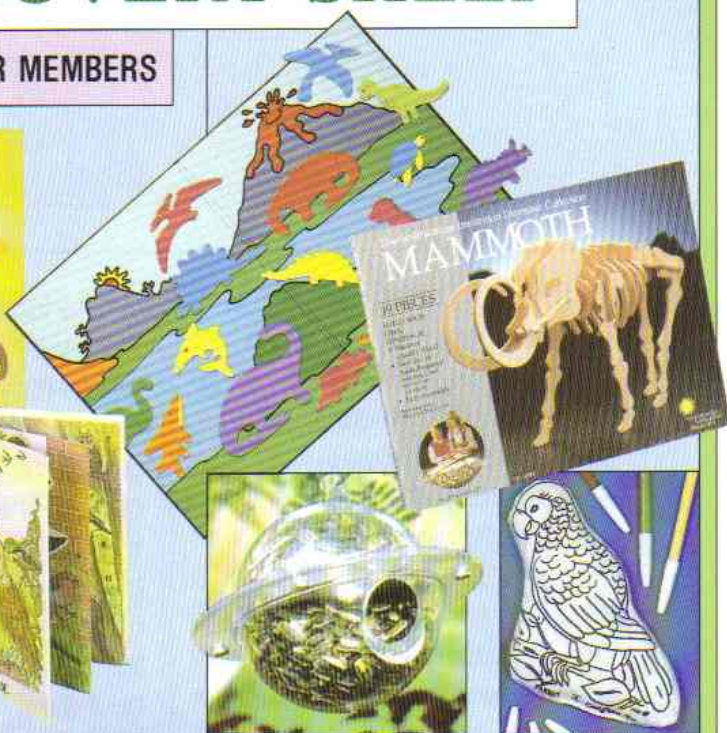
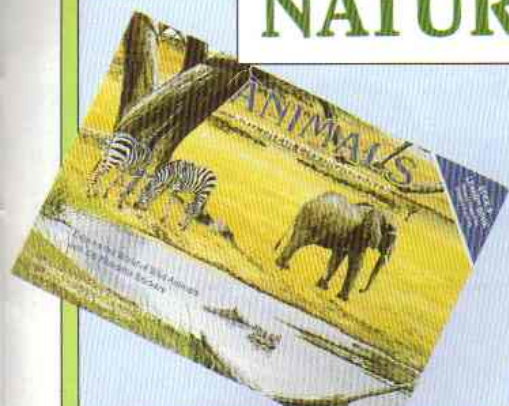
**Answer to Tunnel Trouble, p. 9:**

Hold a ruler on the two blue dots and draw a line between them. Fold the page under along the line and hold the folded edge so that the blue dots meet the green dots on the other side of the page. Now can you finish the puzzle? Read the words from top to bottom to see why it was so hard . . . then ask your friends to work the puzzle.



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# KIDS CAN

**Hi, Rangers!**

I get lots of letters from kids wanting to know how they can help wildlife. So I thought I'd tell you what some kids around the country have been doing. I'll also give you some ideas for projects of your own. You'll see that there are many ways you can help! **R.R.**

## Painting for Eagles

A group of kids in Florida started their own nature club. One of their projects was to help a local nature center raise money to build a bald eagle exhibit. The kids knew that bald eagles are rare birds that need protection. And they knew that the more people learn about them, the more people may want to help. So the exhibit seemed like a great idea.

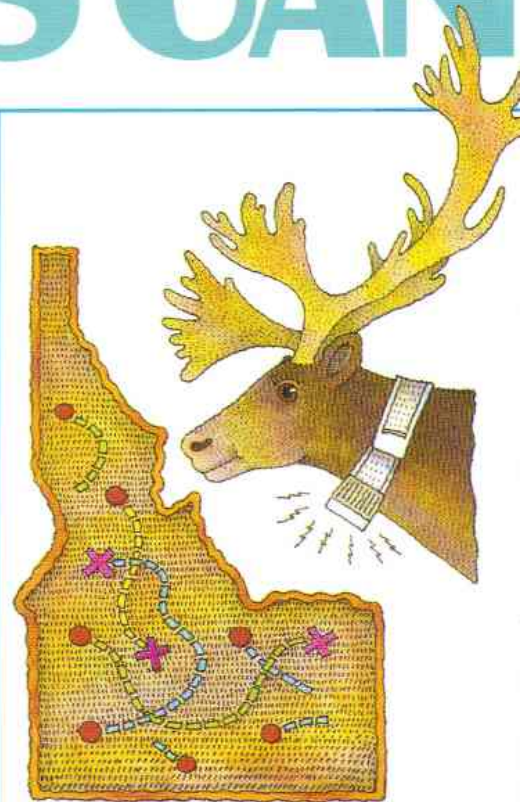


The kids helped the nature center by making posters, which they put up around the community. The posters asked people to bring used aluminum cans to the nature center. And the center sold the cans to a place where they would be recycled. The center made \$2200 from the cans. Now the new exhibit is open and includes two bald eagles. (The birds are injured and can't be returned to the wild.) Thousands of people have already visited the exhibit. And the kids in the nature club were happy to know that *they* helped make it possible!

## The Kids/Caribou Connection

Woodland caribou are common in Canada but very rare in the United States. So last year, scientists decided to catch 24 Canadian caribou and let them go in northern Idaho. (Idaho is one of the few states where caribou are still found.)

Before letting the caribou go, the scientists fitted each one with a special collar. The collars would give off radio signals and let the scientists know where each caribou could be found at all times.



These collars were special for another reason: Kids from 24 Idaho elementary schools decorated the collars before they were put on the animals. Each school "adopted" a caribou and gave it a name.

As the caribou roamed about Idaho, the scientists picked up the radio signals and told the kids exactly where each animal was. The kids then marked "their" caribou's path on a map.

By making the "caribou connection," the kids learned how important it is to help wildlife. And they were glad to be part of a project trying to do just that.



# HELP



## Giving Bats a Break

You don't have to belong to a group to help wildlife. You can start a project on your own. That's what a sixth-grader from North Dakota named Colin Kapelovitz did.

Colin found out that a poison called Rozol was being used in his state. Rozol is used to kill bats that "hang around" where people don't want them. But this poison is also dangerous to other animals and to people.

Colin wrote a letter to his state senator to tell him about the problem. And he asked him to try to get the poison banned. The senator thought Colin had brought up an important problem. He went to work on it. And a few months later, the state government banned using Rozol to control bats!

## Now It's Your Turn

There are plenty of things *you* can do to help wildlife too:

- These states may still be using Rozol to control bats: Colorado, Connecticut, Delaware, Georgia, Kentucky, Maine, Maryland, Massachusetts, Michigan, Montana, Nebraska, New Mexico, Ohio, Pennsylvania, South Carolina, Texas, Washington, West Vir-

ginia, and Wyoming. If you live in one of these states, you can write for an information packet that tells how to go about getting Rozol banned. For more information write to: Bat Conservation International; P.O. Box 162603; Austin, TX 78716.

- Purple martins are the largest members of the swallow family. An adult martin can eat about 2000 insects a day! Unfortunately, there may be fewer of these helpful birds around than there used to be. But no one knows for sure. To try to find out, a wildlife group is keeping track of the number of martins. The group wants to know how many hatch each

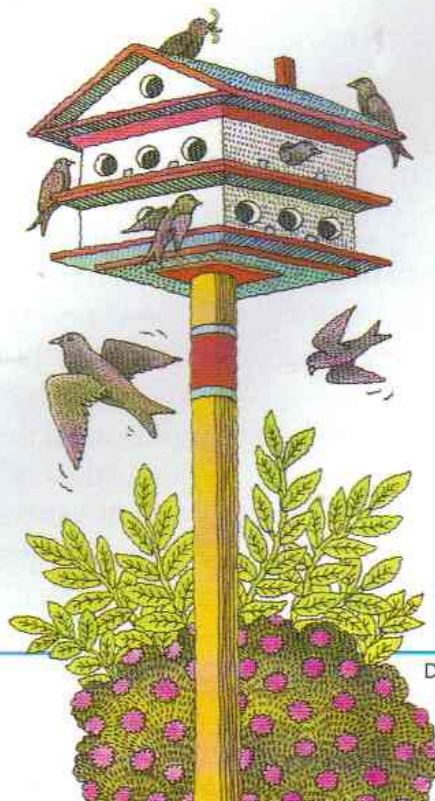
year. So they need information from people who have purple martin houses.

If you know of any neighbors with birdhouses that are being used by purple martins, ask them to write to: Purple Martin Conservation Association; Edinboro University of Pennsylvania; Edinboro, PA 16444.

- Many coastal states hold beach clean-ups each year. People come and help pick up litter that has been washed ashore. And some states have "adopt-a-river" programs. Call your local nature center to find out whether there are any of these programs near you. If there aren't, maybe you and your friends could get together to clean up a neighborhood park or playground.

- Want to make your backyard a great place for wildlife? For a free packet of information, send a postcard to: Backyard Wildlife Habitat Program; National Wildlife Federation; 8925 Leesburg Pike; Vienna, VA 22184-0001.

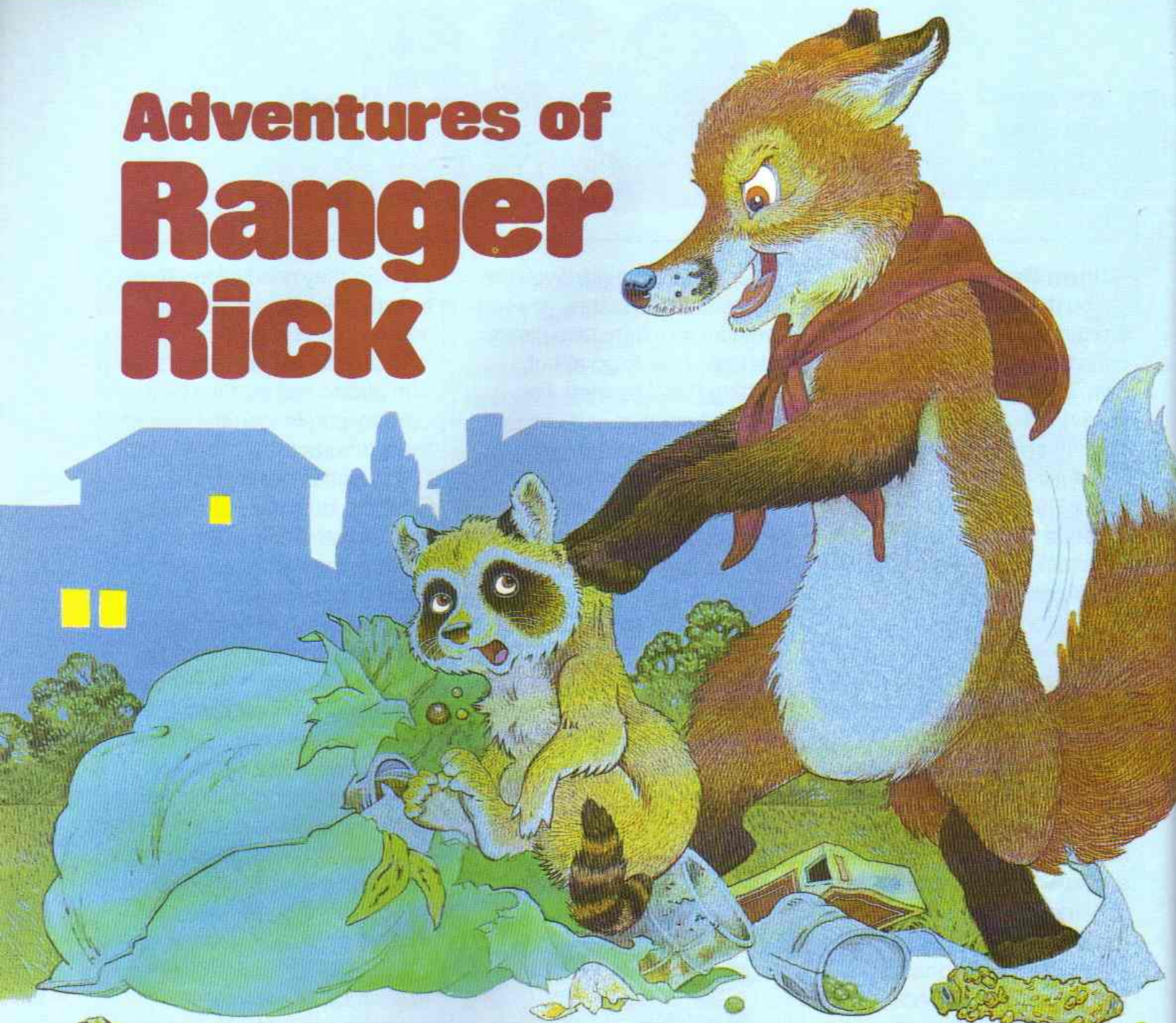
- Perhaps you and some of your friends could volunteer to work at your local nature center. You'd be surprised how many things you can do to show that kids *can* help! 🦇



Drawings by Gordon Kibbee



# Adventures of Ranger Rick



by Carolyn Duckworth

"JJ! Get your nose out of that trash bag," warned Scarlett Fox. Then she picked up the young raccoon by the scruff of her neck and trotted up the quiet, dark suburban street.

"Rick, I can't believe *your* family has raised a trash-raider!" Scarlett said as she set JJ beside Ranger Rick Raccoon. JJ scurried behind her uncle to hide from the fox.

"I know it's hard to believe," Rick sighed as

he turned to look at his niece. "Well, let's catch up with Boomer and Ollie."

As they started walking again through the dark neighborhood, Rick explained why they were taking his niece to Deep Green Wood. "JJ grew up in these suburbs, Scarlett. And she's learned a bad habit. She just can't resist the tasty treats that people throw out in the trash."

"It *is* mighty hard to pass up a free meal," said Scarlett.



"That's true," agreed Rick. "Her mom tried to train her to hunt crayfish along a nearby creek. But JJ had already learned to raid the neighborhood trash."

Rick looked back at JJ as she trotted along behind them. "So she's coming with us to Deep Green Wood. If she's away from easy-to-get trash food, maybe she'll learn to eat wild food again the way we do."

Just then they caught up with Boomer Badger, who had heard Rick's last words. "But this trash is great!" he exclaimed with a hot dog dangling from his mouth.

"Boo-o-o-o-mer," groaned Rick, "you're a big help! We're supposed to be setting a *good* example for JJ."

Grumbling, Boomer spit out the hot dog. "Hmmp. I'll go find Ollie. *He* knows how to have a good time!" He ran on up the street. "Now, where did that otter get to?" Just then Ollie Otter came zooming down a driveway on a skateboard.

"Look ouuuuuuuut, Boooooomer!" hollered the otter. "I can't stop!"

Rick and Scarlett heard the yelling and saw two furry bodies fly through the air.

"Are you OK?" asked Rick as he ran up to Ollie, who landed in the gutter.

"Yup!" Ollie laughed as he dusted himself off. "I found that old skateboard in the trash and just couldn't resist a ride!"

"You crazy otter, you sure took a chance ridin' without a helmet. And where did ol' Boomer bounce to?" asked Scarlett.

"Over here!" yelled JJ from across the street. She had found Boomer sitting in a pile of trash, busily munching on a steak bone.

"Pretty soft landing, huh?" mumbled Boomer in between munches.

"Well, you certainly aren't hurt!" laughed Scarlett as she patted him on the head. "In fact, you look kinda cute with those red spots all over your fur."

"Wha-a-a-?" Boomer ran a forepaw over his head. "I'm *bleeding*! You're laughing and I'm gonna die!"

"We're laughing, you silly badger, because your wonderful bag of trash also has cans of *paint* in it!" explained Rick as he held up a red, dripping can.

"Yee-uck!" groaned Scarlett as she scraped her paws through the grass. "I can't get this stuff off." She sniffed her fur carefully. "It's *oil* paint—I'll never get clean."

"Here, Scarlett, try this," said JJ. She handed a can of nasty-smelling liquid to the fox. "It's *turpentine*. That's what people use to clean oily paintbrushes. I've seen it in lots of trash bags."

"Thanks, JJ," said Scarlett. She pulled some paper out of the trash and dabbed the turpentine onto her paint-streaked paws.





Just then the animals heard a strange sound: *ka-chink! ka-chinka, ka-chinka, ka-chunk!* A can rolled to a stop in the gutter. Rick chuckled. "Found a toy, Ollie?"

"You bet!" said the otter. Then he peered at the label. "Ever heard of pess-tuh-KIDDY?"

Rick looked over Ollie's shoulder at the can's label. "Omigosh, Ollie! It's PESS-tuh-side—*pesticide*—stuff that kills insect pests. I hope you didn't get any of that on you!" Then he began muttering, "Oil paint, turpentine, pesticide . . . they shouldn't be in this trash."

"How come, Rick?" asked JJ, her eyes wide.

"Because they're all *toxics*—poisons," the raccoon said with a worried look on his face. "If they're thrown in the trash, they just go to the local landfill. There they can leak out and seep down into the ground. And that can poison the town's water supply."

"How are people gonna get rid of that stuff if they don't put it in the trash?" asked Scarlett.

"Good question," said Rick as he carefully picked up the can of pesticide. "H'm-m-m, 'Dispose of properly' is what the label says."

"What's *that* mean?" asked JJ.

"Some experts say if you wrap the can or jar in lots of newspaper and plastic bags, the poisons won't leak out," Rick explained. "But probably the best way is to save toxic trash for special collection days."

"Like this, Rick?" asked Boomer as he held up a piece of paper he had pulled out of the trash. It was a notice that said Saturday would be a toxic trash collection day.

"That's tomorrow, Rick," Ollie pointed out. "But I want to know what the collectors will do with all the poisons."

Scarlett looked over Boomer's shoulder and began reading the notice out loud. It explained that people could take their toxic trash to a





nearby shopping center. There it would be collected by people trained to handle dangerous poisons safely. Some of the poisons would be used again or made into other products. Some of them would be changed into safer chemicals or would be destroyed. The rest would be taken to a specially built landfill where poisons would have a harder time seeping into the ground.

"It's not a perfect solution. There's always a chance that the landfill will leak," said Rick. "But it's a lot better than throwing the poison into a landfill that you *know* will leak!" He looked over at JJ. She was lugging the cans to the driveway.

"Let's stack all these cans, and leave that notice on top," JJ suggested. "Maybe someone will see it in the morning and get the message!"

Drawings by Alton Langford



"For a trash-raidin' raccoon, you've come up with a great idea!" said Scarlett.

The animals quickly stacked the cans. Then Boomer lifted JJ so she could put the last can on top.

"OK, let's head on home, gang," said Rick as he dusted off his paws.

"Are you sure there are lots of tasty crayfish for me to eat in Deep Green Wood?" JJ asked her uncle.

"Not only crayfish, but juicy berries and nuts and all kinds of good things," Rick promised JJ as they walked down the street. 🦊

**Rangers:** Ask your parents to read the toxic tips on this page and the chart on the next two pages. Thanks! R.R.

### Parents: What To Do About the Poison Problem

The chart on the next two pages lists a few poisons you might have around the house. There are lots of others too. These poisons can harm your family. And when they are thrown away, they can harm people who collect the trash. They can also pollute the air and water when they leak out of landfills. So use *non-poisonous* products whenever you can.

If you have no other alternative and *must* use a poisonous product, follow these tips:

- Buy only what you need.
- Use only the amount recommended on the label.
- Keep product in original container, or label storage container clearly so it can't be mistaken for another product.
- Reuse the product if possible. (For instance, turpentine can be reused if you let the paint settle and then drain off the liquid.)
- Share leftovers with friends and neighbors.
- Always use toxic products outside or in a well-ventilated area. (This means all windows opened wide and an exhaust fan running.)
- Wear goggles and gloves when using toxic products, and if some gets on your skin, wash with lots of soap and water. (Never wear soft contact lenses while using toxics—fumes can get behind the lenses and damage your eyes.)
- Keep all toxics locked up away from kids and pets, and don't use them if you're pregnant.
- For more advice on how to handle and dispose of toxic products, call your local health, water quality, or solid waste department.



# IS YOUR HOUSE A TOXIC DUMP?

**Rangers:** Give this chart to your parents! It points out poisons they may have in the house, how to get rid of them, and what to use instead.

<b>POISON</b>	<b>HARMFUL EFFECTS</b>	<b>HOW TO DISPOSE OF THEM*</b>	<b>ALTERNATIVES</b> <small>(more information at bottom of chart)</small>
<b>Paint Remover &amp; Other Solvents</b>	<ul style="list-style-type: none"> <li>• short-term: irritate and damage skin, eyes, lungs; cause nausea, poisoning</li> <li>• long-term: cause allergies, nervous system disorders; damage kidneys and lungs</li> <li>• see <b>1, 2, 3, 4</b> in the key below</li> </ul>	see <b>A, B</b> at bottom of chart	<ul style="list-style-type: none"> <li>• no substitutes for most solvents; instead of paint remover: <ul style="list-style-type: none"> <li>• sand off old paint or use heat gun (wear goggles and mask)</li> <li>• use nontoxic alternatives available in sources listed below</li> <li>• never use gasoline as a solvent</li> </ul> </li> </ul>
<b>Furniture &amp; Shoe Polish</b>	<ul style="list-style-type: none"> <li>• see Paint Remover &amp; Other Solvents</li> </ul>	see <b>A, B, E</b>	<ul style="list-style-type: none"> <li>• polishes without trichloroethylene, methylene chloride, or nitrobenzene</li> <li>• nontoxic alternatives: many "recipes" available in sources listed below</li> </ul>
<b>Oil-based Paints</b> <small>(including spray paint)</small>	<ul style="list-style-type: none"> <li>• irritate eyes, skin, lungs</li> <li>• cause headaches, nausea</li> <li>• require solvents to clean up tools</li> <li>• see <b>1, 3, 4</b> below</li> </ul>	see <b>A, B, C, E</b>	<ul style="list-style-type: none"> <li>• latex paint</li> </ul>
<b>Drain, Oven, and Toilet Cleaners</b>	<ul style="list-style-type: none"> <li>• some kinds can burn skin</li> <li>• mixing ammonia and bleach creates deadly gas</li> <li>• see <b>1, 2, 4</b></li> </ul>	drain & toilet cleaners: <b>A, D</b> oven cleaners: <b>A, B</b>	<ul style="list-style-type: none"> <li>• prevent clogged drains by pouring boiling water down drain weekly; clear with vinegar, baking soda, boiling water</li> <li>• clean toilets &amp; ovens with baking soda, vinegar, nontoxic alternatives in sources listed below</li> </ul>

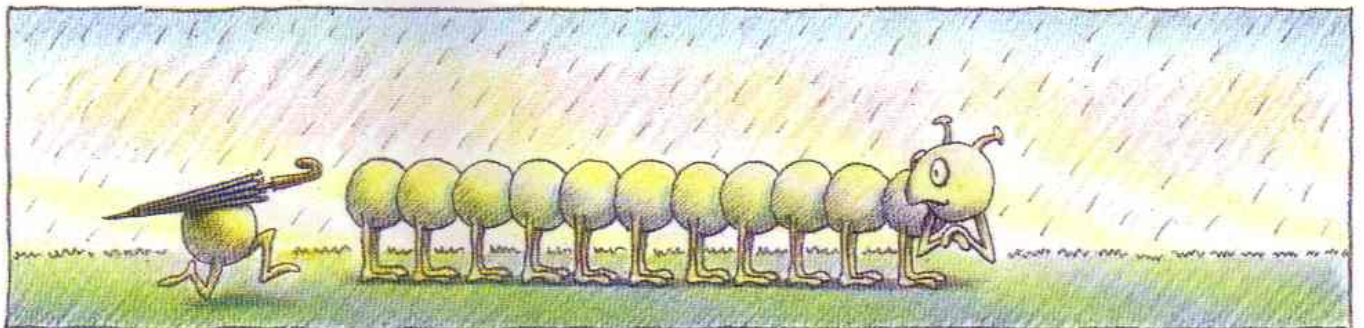
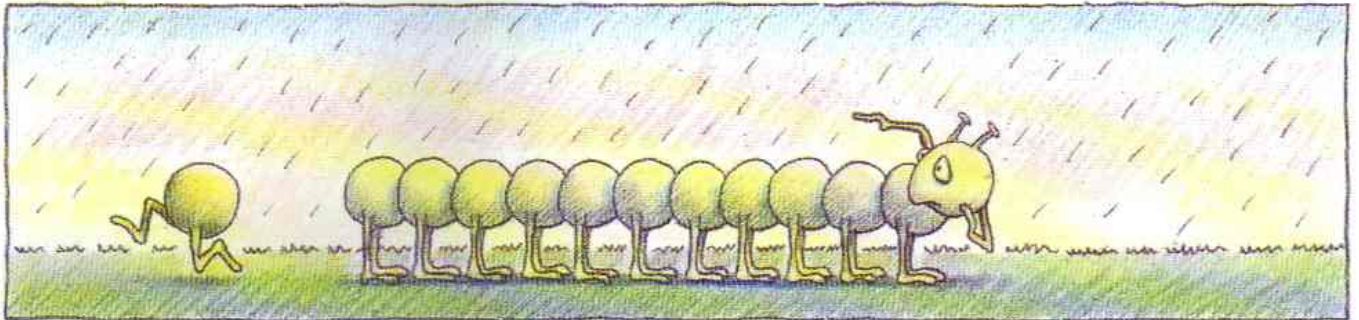
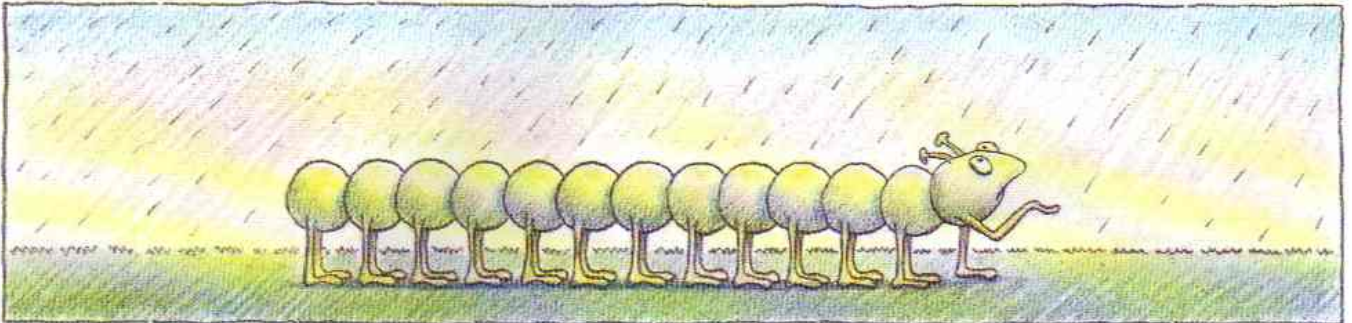


<p><b>Window Cleaners, Ammonia Cleaners, Bleach, Powdered Cleansers</b></p>	<ul style="list-style-type: none"> <li>• some kinds can burn skin</li> <li>• mixing ammonia and bleach creates deadly gas</li> <li>• see also <b>1, 2, 4</b></li> </ul>	<p>powdered cleansers, window cleaners: <b>C</b></p> <p>ammonia cleaners: <b>A, B, D</b></p>	<ul style="list-style-type: none"> <li>• baking soda instead of powdered cleansers &amp; ammonia cleaners</li> <li>• non-chlorinated powder bleach instead of liquid bleach</li> <li>• vinegar &amp; water instead of window cleaners</li> </ul>
<p><b>Mothballs</b></p>	<ul style="list-style-type: none"> <li>• poisonous if you inhale too many of the fumes</li> <li>• cause headaches, nausea</li> <li>• see <b>1, 2, 3, 4</b></li> </ul>	<p>see <b>A, B, E, Never D</b></p>	<ul style="list-style-type: none"> <li>• cedar chips</li> <li>• sachets of herbs such as lavender, bay</li> </ul>
<p><b>Pesticides: Herbicides Fungicides Insecticides</b></p>	<ul style="list-style-type: none"> <li>• can be absorbed through skin and by breathing</li> <li>• cause headaches, nausea, fatigue, tension</li> <li>• see <b>1, 2, 3, 4</b></li> </ul>	<p>see <b>A, B, E, Never D. Only A</b> for old, banned, or restricted pesticides</p>	<ul style="list-style-type: none"> <li>• soapy water to kill aphids, mites</li> <li>• garlic spray or citronella to repel many insects</li> <li>• other nontoxic "recipes" in sources listed below</li> </ul>
<p><b>Used Motor Oil &amp; Car Batteries</b></p>	<ul style="list-style-type: none"> <li>• some poisons in used oil may be absorbed through skin</li> <li>• battery acid can burn skin, eyes</li> <li>• see <b>1, 2, 3, 4</b> for oil; <b>1, 4</b> for acid</li> </ul>	<p>oil: recycle at gas station or at store; or <b>A, Never C, D.</b></p> <p>battery (including battery acid): return to where purchased, or <b>A</b></p>	<p>no alternatives available (wear gloves, goggles when handling)</p>
<p><b>KEY TO RED LETTERS AND NUMBERS</b></p>	<p><b>1</b> deadly if swallowed</p> <p><b>2</b> may cause cancer</p> <p><b>3</b> flammable</p> <p><b>4</b> cause air/water pollution</p> <p><b>*</b> Check first with your local health department or waste utility. If no information is available locally, then follow the guidelines for each poison.</p> <p><b>A</b> Turn in on toxic waste collection day</p> <p><b>B</b> Use it all up, then dispose of container as in <b>C</b></p> <p><b>C</b> Wrap container in lots of newspaper, put in plastic bag, and put out in trash</p> <p><b>D</b> Dilute leftovers with lots of water, then pour down sink (<i>Do not do this if you have a septic tank.</i>)</p> <p><b>E</b> Share leftovers with neighbors</p>	<p><b>FOR MORE INFORMATION</b></p> <p><b>On disposal of toxics or on planning a community collection day:</b></p> <ul style="list-style-type: none"> <li>• Golden Empire Health Planning Center, 2100 21st St., Sacramento, CA 95818 (pamphlets, information packets, and curriculum guides on household toxics &amp; collection days)</li> <li>• League of Women Voters of Massachusetts, 8 Winter St., Boston, MA 02108; 617-357-8380 (video and slide show about organizing collection day)</li> <li>• U.S. Environmental Protection Agency Superfund Hotline: 800-424-9346 (provides information and names of whom to contact in your state)</li> <li>• <i>Toward Hazardless Waste</i>, Sally Toteff &amp; Cheri Zehner; METRO Water Quality, 821 Second Ave., Seattle, WA 98104 (also curriculum guide and other information)</li> </ul>	<p><b>On nontoxic alternatives:</b></p> <ul style="list-style-type: none"> <li>• <i>Rodale's Natural Formula Book for Home and Yard</i>, Dan Wallace, editor; Rodale Press, 33 East Minor St., Emmaus, PA 18049</li> <li>• <i>Nontoxic and Natural</i>, Debra Lynn Dadd; distributed by St. Martin's Press, 175 Fifth Ave., New York, NY 10010; 800-221-7945</li> <li>• "Household Hazardous Waste Wheel"; Environmental Hazards Management Institute, P.O. Box 283, Portsmouth, NH 03801; 603-436-3950 (a guide to alternatives and disposal methods for household toxics)</li> <li>• Livos Plant Chemistry, 614 Agua Fria, Santa Fe, NM 87501; 505-988-9111 (catalog of nontoxic paints, wood finishes, leather polishes, etc.)</li> </ul>



# Critter Crackups

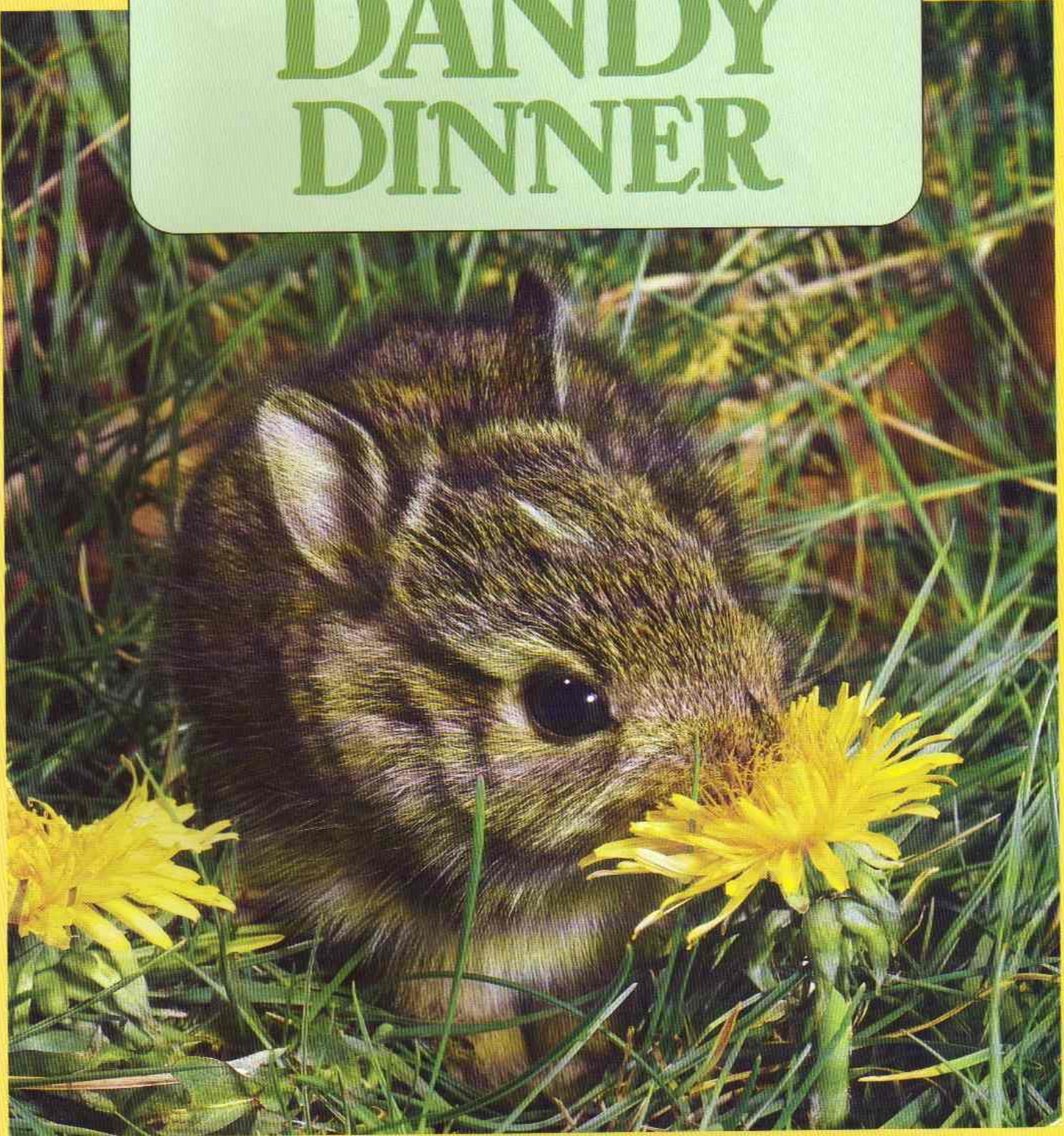
by Anthony Taber



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# A DANDY DINNER



Coltontail by Alvin E. Staffan

**Dandelions come with spring—a sunny, yellow habit.  
They're tasty food for many creatures, like this young wild rabbit.**





Thirteen-lined ground squirrel by Carl R. Sams II/Dembinsky Assoc.



With leaves and stems to munch on,  
This ground squirrel is a winner;  
While others seek food elsewhere,  
She'll have dandelions for dinner.

As the blooms turn older,  
Their yellow turns to gray;  
Puffs of silk on tiny seeds  
Carry them away.





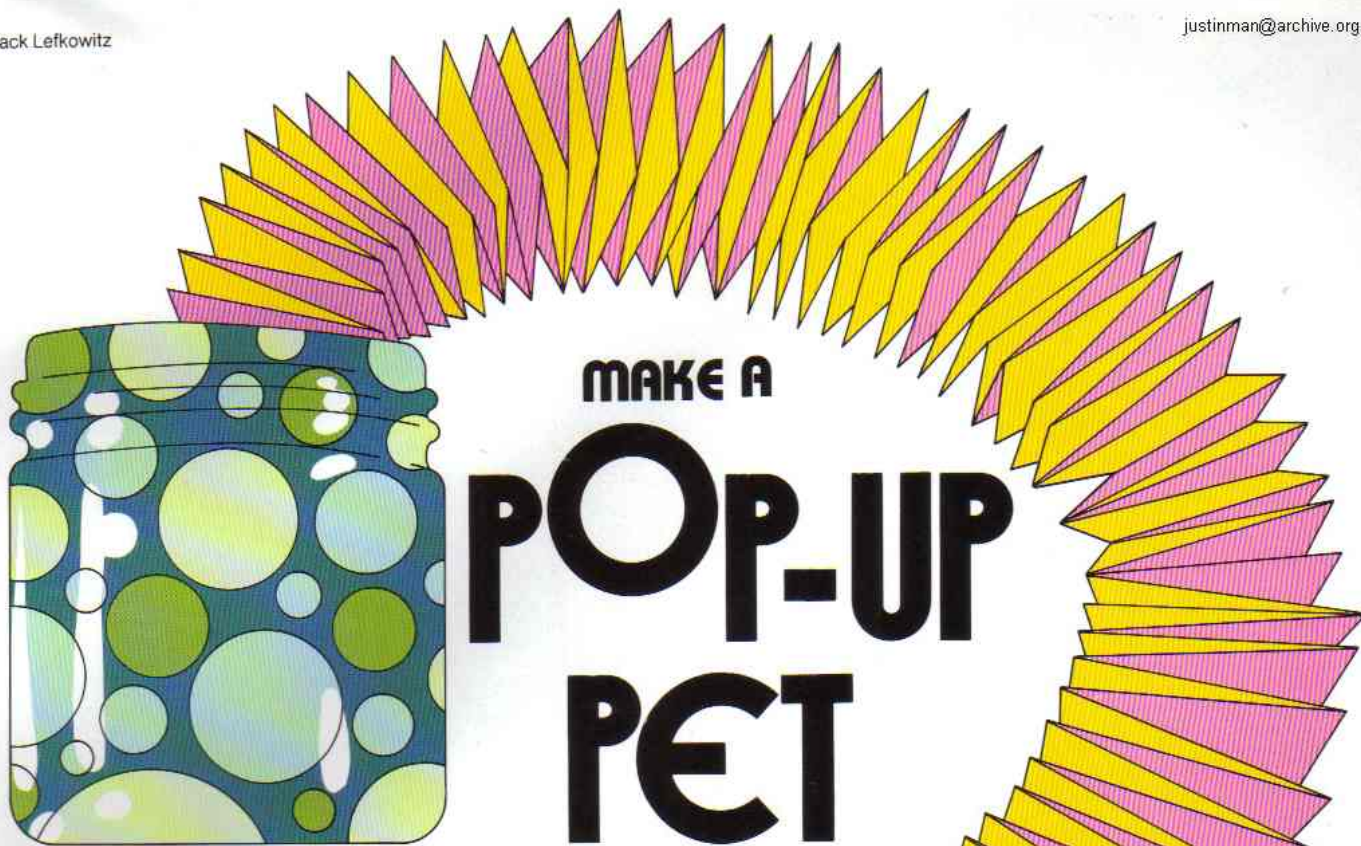
Sailing far on any wind,  
The seeds fall down with ease.  
But might those puffs—I wonder—  
Make this black bear sneeze?

—Sallie Luther

Black bear by Tom & Pat Leeson







by Peter Hamilton Kent

Would you like to have a really different pet? Then make a pop-up pet!

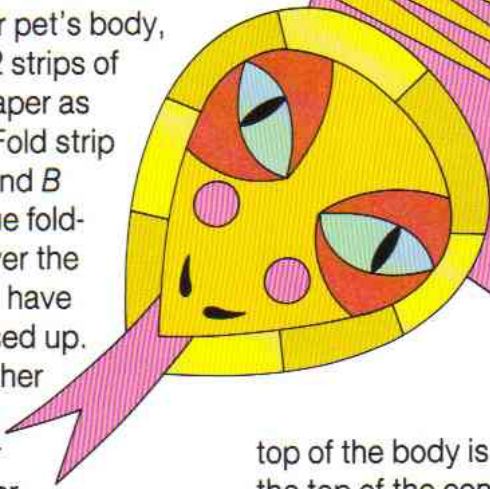
### Here's what you need:

- a small jar or can with a lid
- enough paint or construction paper to cover the container
- about 28 strips of  $1\frac{1}{4} \times 12$ " construction paper. Half the strips can be one color and the other half another color. (You'll need more strips if your container is taller than  $3\frac{1}{2}$ " and fewer strips if your container is shorter than that.)
- small pieces of construction paper of different colors
- scissors
- tape

### Here's what you do:

- Paint your container or cover it with paper so that no one can see what's inside.

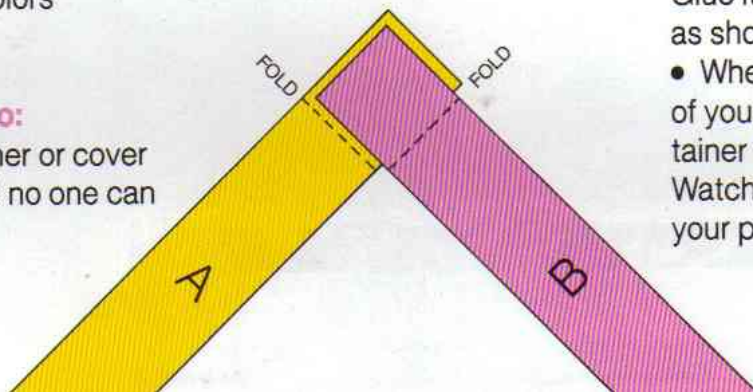
- To make your pet's body, tape together 2 strips of construction paper as shown below. Fold strip A over strip B and B over A. Continue folding one strip over the other until both have been almost used up. Then tape another strip of construction paper to A and another to B. Keep folding and adding strips. Every so often, push your pet's body down into the jar or can. When the




top of the body is even with the top of the container, stop adding strips. Glue the ends of the last two strips together.

- Make a face for your pet from the small pieces of paper. Glue it to the top of the body as shown.

- When you meet up with one of your friends, open the container while shaking it slightly. Watch your friend's face as your pet slithers out! 🐍







This two-year-old mountain goat is still young enough to hang around with Mom. But the four-month-old opossum on the front cover is already scampering about on its own.